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EXAMINATION
O F

Dr. Woodward's
STATE of *PHYSICK*
and *DISEASES.*

By JOHN QUINCY M. D.




L O N D O N,
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THE PREFACE.

PON the first Perusal of Dr. Woodward's State of Physick and Diseases, it seemed to me so singular a Performance, and so far out of the common way of Thinking, as made me believe it could never come into much Regard, especially so as to require any publick Remarks.

BUT unexpected Incidents have it seems altered the Case. Some Persons have taken a Liberty to treat both that and the Author in a very odd manner. The Singularity of Stile, the uncommon Notions therein maintained, and the strange Treatment of

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all other People, has been an Occasion of more Laughter than Envy, and produced a great deal of Ridicule, but no serious Notice. On this Provocation a Crowd of Volunteers also on the other side, for want of better Occasion to make themselves considerable, have raised a great deal of Clamour, and thrown out large Quantities of Calumny against some of the greatest Eminence in the Faculty, on a Supposition of their being Encouragers of such Treatment. This Bustle has drawn many to look into the Dispute, who are more biassed by their Affections than their Judgments, and as such are naturally inclined to interest themselves on that Side, which appears to have been injured. Dr. Woodward has not wanted those who have laboured hard to give his Cause this Turn, and who not only keep up the popular Mistake touching his imaginary Opposers, but also strongly suggest the Opposition it self to arise from the unanswerable Arguments in the Book, and an invidious Emulation of the Doctor's Merit.

MANY things are capable of Misconstruction, and the Publick is frequently shewed Matters in false Lights; but nothing favours these Deceptions more, than Appearances of Oppression and Persecution, because Good-Nature is very apt to go on the weakest Side. And I am sorry to have occasion here to take notice, wherein this generous Disposition seems to have misled a very considerable Writer into a Mistake

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take about this Controversy: I mean the Free-Thinker, who, in one of his Papers*, has given such a Turn to this Affair, as would lead an unwary Reader into an Apprehension, that Dr. Woodward had been injuriously treated by the Faculty. This ingenious Censor judged according to the Representation made to him of this Affair, which was most certainly done by partial Friends; but his Candour and Fairness is such, that I make no doubt but he will lay the Fault on the other side, when the Matter comes to be stated to him in a true Light; and he may be assured, the exhibiting an aukward Piece of Malice on the Stage, was so far from being encouraged by any Gentlemen considerable in the Faculty, that it met with all possible Discouragement and Opposition from them.

BUT the surest way to be set right touching the Grounds of Provocation and Ill-Usage, is to read over the Doctor's Book, which I find few have done, tho almost all are become Parties in the Dispute; and whosoever does this, I am utterly mistaken if they cannot easily account for a great deal of this kind of Treatment, without imagining Persons of Character to be concerned in it; for so much Weakness, with so much Ill-Nature, can never fail of Multitudes in its Opposition, because every one, who is not better

* Numb. 126.

employed, is willing, and almost every one thinks himself able for such an Engagement. It is therefore to be reckoned a great Hardship, that because Dr. Woodward has raised up to himself Enemies, the Quarrel must be charged upon those who are vastly superiour to any such Notice, altho indeed it is no wonder that he and his Friends have Skill enough to make such use of it, and to give him Appearances of Consideration and Regard, from the very same Circumstance, that has made him both offensive and ridiculous.

I CANNOT but still remain in the Opinion, that the Doctor's Book neither requires nor deserves any Notice at all; and profess my self both a Stranger and an Enemy to all that has hitherto been said about it, or the Author; but because such gross Misrepresentations, as have been already mentioned, have been founded upon its Neglect, I have at last given my self the Trouble of the following Examination.

IT has been taken notice of in many Places, how difficult it is to answer the Doctor with Seriousness; and here it may not be amiss, once for all, to observe, that his Language and Sentiments are equally peculiar; insomuch that it is as hard a matter to understand him, as it is to convince others wherein he is mistaken. It is an easy matter to dress up an Amusement in figurative Terms, that from a superficial Resem-

Resemblance to Truth shall be pleasing to undiscerning Judges ; and yet be a much harder Task to shew the Errors of such a Performance, than of one expressed in determinate and significant Words.

BUT the greatest Hardship in this Affair, is, that the Doctor seems artfully to intrench himself in Ambiguities, not only by writing in a Language unequal to the Subject, as is particularly shewn in the Case of Purges, but also in the most perplexed manner that even the English Tongue will admit of: For the main of the Book is filled with Expressions of great Import and Regard, with no other apparent View, but to make himself considerable at the Expence of others, and is a mere Harangue to the Populace. A Concern for his Country, the Havock of Diseases, and the Errors of the common Practice, are the Favourite Heads of his Discourse; so that an Answerer of this Gentleman will find himself more frequently involved in Reflection and Inveective, than Topicks of Science and Instruction. His Hypothesis is a Trifle that, I dare say, will not engage the Attention of any one Person: but when that is made an Occasion of Bitterness and Misrepresentation of others, and a little Philosophy covers a great deal of Self-Interest; it will lie heavier upon Dr. Woodward to justify his Honour than his Learning, and puts his Opposers upon Difficulties, not very agreeable to a good Temper.

THE Freedom therefore that I have taken, in the following Pages, with the Doctor, will not, it is hoped, be thought greater than the Peculiarity of his Stile, and the Usage he gives to others, will justify. Where there are such frequent Returns of Reflection, of the worst nature too, as the Reader will there find, it is a hard matter not to be offended, and to feel such Emotions, as are apt to flow over in Expressions of Acrimony and Warmth. If I have exceeded due Bounds in this respect, I desire it may be placed to that Resentment, which the best of Tempers cannot but, in some measure, feel on the like Occasions.

THERE are a great many Circumstances in the Publication of this Hypothesis, and in its Defence, that very naturally bring to mind the Conduct of the Doctor and his Friends on a former Occasion. Very few general Readers are Strangers to his Essay towards a Natural History of the Earth. Soon after the Publication of that, some Gentlemen, well acquainted with the Subject, found fault with it, and gave their Objections against it in printed Tracts; inso-much that the World then looked upon Dr. Woodward to be highly engaged to answer for himself, either by better clearing up his own Opinions, or retracting them as Mistakes: Not that every Caviller, or ignorant Medler, should be regarded, but that the
Points

Points in dispute might be brought to a fair Decision between Men of Learning and Candour ; and such then the Doctor had to do with. But not one jot of Notice was taken by the Doctor of all the Arguments standing out against him ; but the Reverend Mr. John Harris, then A. M. but since D. D. fell hard upon all concerned therein with a great deal of Roughness and ill Usage, and only promised a Solution of their Difficulties in the Doctor's larger Work, of which this it seems was but a Specimen.

*BUT that the Reader may the better see how this hopeful Second at that time treated the Doctor's Opposers, and what Encouragement a Person has from thence seriously to engage with him on any account, it may be proper, out of a great many, to give one Example of his Civility. His Book is extant under the Title of Remarks on some late Papers, relating to the universal Deluge, and to the Natural History of the Earth ; and to one of those he thus concludes, Such undoubtedly is the *Materia informata* of his Noddle. Now if he will allow me one Scrap of *Latin*,—I'll have done ; and to oblige him the more at parting, it shall be out of his old beloved Acquaintance, *Ovid's Metamorphosis* :*

—————*Rudis indigestaque Moles,
Nec quicquam nisi Pondus iners*—————

Which,

Which, to save him the trouble of turning over his Dictionary to construe, I will thus english :

A clumsy Load of indigested Brains,
Where nought but heavy lumpish Dulness reigns.

IT is particularly to be noted, that this is against one of the most Learned Physicians of our Country.

THIS ill Usage however did not altogether deterr others from further Inquiry into the Doctor's Hypothesis : for the Learned Dr. Arbuthnot some time after published an Examination thereof; in which he proved beyond contradiction, the main Support of that Theory to be unphilosophical and absurd : and what is more remarkable, by comparing STENO's Pro-dromus de Solido intra Solidum with Dr. Woodward's Performance, he has shewn that whatsoever is therein agreeable to true Philosophy is taken from thence, and that wherever Dr. Woodward has made any Alterations, he has had the misfortune to err. But this also had no Regard from the Doctor ; nor is his great Undertaking come out to this day : tho it were to be wished, that he or his Mathematical Assistants, instead of writing against Camerarius, had answer'd these Objections brought against his Work.

NOW

NOW one would naturally think that a Man who had got so ill off before, would be more wary another time ; and it would certainly have been well in Dr. Woodward to have cleared both his Learning and his Reputation in this first Dispute, before he had plunged himself into another. For if this way of Propagation of Knowledge obtains, the Publick will have but an indifferent time of it ; and it is better for Society to remain in Ignorance, than be thus instructed at the expence of their Peace, and have the Understanding advanced on the Ruins of Decency and Good-Manners. But *jacta est Alea*, Dr. Woodward has wrote again, and he has got a Clergyman again in his Retinue. And thus much was thought proper to call to remembrance of the former Controversy, because those whom the Doctor was able to retain on that account then, seem chiefly to abide in his Interests on the present Occasion, and are striving hard again to overlay this Dispute with Misrepresentation and Calumny.

ON these Considerations it cannot be wonder'd at, that nobody hath as yet thought it worth their while to engage with Dr. Woodward again on Terms of Decency and Candour ; and that all the notice hitherto taken of his last Book hath been in a manner most suited to a rougher kind of Warfare. But we see already what sort of Return may be expected :

for the Doctor has again got on his side a Divine of the Church of England, who has published An Appeal to Common Sense, or a Sober Vindication of Dr. Woodward's State of Physick; and which has some Passages in it so remarkable, that they cannot be altogether passed by here.

*THIS Divine says, * Every one that has read his Natural History of the Earth—knows how well he has acquitted himself—And 'tis a provoking thing to find a Man of his Parts ill treated, only for his superior Worth and Genius. As for the Doctor's Worth, I desire not to detract from it in any respect; but how he hath acquitted himself, &c. I leave to others to judge, from what has been said; and promise, that if he or his Friends in particular prove any Mistake therein, it shall be as publickly amended as they can desire.*

I AM unwilling to make some Reflections which naturally arise from the very Air and Complexion of this Gentleman's Defence of Dr. Woodward's Merit; but I do not think it fair, that the Doctor should suffer for the Folly and Rashness of others. But for the Credit of this Advocate, let it be compared where he says, † Dr. Woodward has given

* Appeal to Common Sense, p. 4.

† Pag. 5, 6.

no offence, but in writing a Book for the common Benefit of Mankind—And tho in this he was obliged to set forth the Mistakes of others, he does it every where with Good-Manners: *with what soon after follows*; * If what Dr. Woodward has alledg'd against these Gentlemen be allow'd to be just and reasonable, their Names ought not to be mention'd in Society but with Scorn, that are every day trying such Experiments upon the Lives of their Fellow-Subjects. Now when this Divine can reconcile writing for the Benefit of Mankind, and Good-Manners, with a Charge of trying dangerous Experiments upon the Lives of Fellow-Creatures; he shall be allow'd a competent Advocate of another's Merit. As for his frequent Citations or Challenges for a serious Answer to his Friend, I must leave it to the Publick to determine whether the following is so or not; and whether Dr. Woodward's Book, as he says, is wrote with a great Spirit, and abounds in Wit and Learning; and is the only intelligible and consistent Scheme of Physick, that has ever yet appeared in Print, is also now before the same Judges.

THE Tenour of this Appeal, or Sober Vindication, is to say as extravagant things in the

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praise of Dr. Woodward, as it does in the reproach of those of different Sentiments. But it may be convenient to advertise this Divine, with many others who will be meddling with what they understand not, That a Smattering, a mere superficial Knowledge, will not enable Persons either to raise Schemes and Theories, or be Judges of them when made : and particularly in answer to † his having met with several Physicians of eminent Character and Experience, that approved the Work, and admired the Author's great Genius, Skill, and Learning in it ; I never yet met with one Physician, or any one Person of common Reading and Capacity, who had read this Work, and gave it a good Word, but on the contrary treated it with Derision and Contempt.

BUT what is most of all surprizing in a Person of this Character, is his Support of Dr. Woodward in the most detestable Office a Man can be employ'd in ; and that is, in spreading and fixing Accusations of Reproach, and Misrepresentations of others. The Filth that this Reverend——

——Pudet hæc Opprobria——

stirs up on this occasion, is what an ordinary Patience would not bear going through. If Dr. Woodward has a good Cause, it has certainly been so ill

defended, that his Enemies might almost pity him ; but much better had it been for him, if his Advocates had not so much to plead for their Defence in this dirty Part from his own Example. But I will not tire the Reader with more than one Instance further of the ill Usage with which Dr. Woodward and his Clergyman treat Gentlemen most eminent in the Profession ; and that is, in affirming, without any Authority in the world, * that Dr. Mead is the Author of some of those Writings against Dr. Woodward, particularly the Letter of Dr. Tripe from Bath. Altho neither I, nor any one else, who is acquainted with Dr. Mead's Character, and know how much better his Time is employ'd, could ever so much as suspect this ; yet because it is so positively asserted, I resolved to be thoroughly informed of this Matter, and from an exact Inquiry do assure the World, that Dr. Mead is not the Author of that Pamphlet, nor so much as of any one Paragraph in it, or in any other Pieces wrote against Dr. Woodward : Such Paper-Quarrels are as much below his Notice, as his Character is superior to all manner of Competition with the Promoters of them. Strange Usage this, from Dr. Woodward and his Friends ! falsely to suppose a Gentleman the Author of a thing, and then abuse him for being so. Such Arts, however, will never serve him, in the Opi-

* Appeal, p. 8, 10.

nion of equitable Judges : But from his Assistant the Clergyman in particular, who has in a very sanguine manner vouched this Falshood, it is desired that the Odium Theologorum may be kept within its bounds, because Medicine has been hitherto in the main a very peaceful Science, and is much better supported by Reason than Scandal.

BUT I must not conclude without desiring one thing in particular from Dr. Woodward, and that is, That when he writes again in Physick, he would be pleased in his Quotations from Hippocrates to distinguish his genuine Works from those which are known to be spurious; because most of his Authorities are taken from the latter.



An

E R R A T.

In Page 95. Line 17. for in the manner there managed was of great service, read, in the manner there proposed would have been of great service.



An EXAMINATION of *Dr. WOODWARD'S* State of Physick and Diseases.



BEFORE I enter into an Examination of *Dr. Woodward's* Opinions, it may be necessary to apprize the Reader of the great Difficulty which continually arises from his peculiar and affected Way of Expression, whereby it is often impossible even to guess at his Meaning.

THE Doctor says, * *In every thing that Dr. Freind hath hitherto published, and particu-*

* Page 54.

larly the present Commentaries, he hath advanced several *HYPOTHESES*; some of which are rightly supported, and the rest all so ingenious, that I cannot but be pleased with them. Every one who has read *Dr. Freind*, will find it very difficult to understand what is here meant by *Hypotheses*: That Gentleman has advanced many Propositions which he has fully proved, but for Hypotheses, in the common Acceptation, he disclaims them, and is an utter Enemy to them; but yet in this sense *Dr. Woodward* must use the word, because he says just after, † *But then I can see no reason to debar myself of the same Pleasure from those of Dr. Willis, Dr. Sydenham, Dr. Morton, and other Physicians, to whose Hypotheses Dr. Freind is so averse; he having not, exclusive of others, the sole Privilege of entertaining the World this way.* Yet here again we are in a Contradiction; for *Willis's* Works are professedly an Hypothesis, being founded upon supposititious Principles, such as *Sulphur, Salt, &c.* and *Dr. Morton* accounted for Diseases and their Cures from a Supposition of their Seat being in the Animal Spirits: But then *Dr. Sydenham* went upon no Hypothesis, but utterly disclaimed all such delusory Conceits, and drew no Conclusions except from

† Page 54.

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Facts and Experience. Under the same Obscurity does the Doctor go on, when he speaks of the Antients forming Hypotheses ; and giving the same credit also to his own Countrymen, such as *Bacon, Gilbert, Hobbs, Boyle, Wallis*, and others ; for these Persons wrote in so different a manner, that this Term in no one determinate Signification can be applicable to them all : so that, for what it stands for here, it may be *every thing*, or *nothing*, with equal Propriety. But when it is further added, That *Sir Isaac Newton hath advanced several very extensive and considerable Hypotheses* ; every one who understands any thing of *Sir Isaac Newton's* Philosophy, knows that it is quite upon another foot than Hypotheses ; and that *universal Attraction* or *Gravitation* is a *Datum*, from the known Properties of which he has made his great Discoveries in the Knowledge of Nature. It is certainly therefore necessary that they who take upon them to write on those Matters, should understand the Terms of the Science with which they meddle. What a strange Swell of Sound has the Doctor set himself off with, in all these Citations, without conveying any determinate Meaning ? And I am much of opinion, that the Reader upon due Reflection will find a great part of his whole Performance of the same Turn. Which

by the way may serve for some Excuse to this Gentleman's Friends, who are even clamorous for a sober Answer to his Book, why it has been so long neglected; because it is not so easy a Task, as some may imagine, to reason with one who has no Meaning, and talk with a Man that says nothing.

IF the Doctor had been less full of himself, and would have been at all determined by the Sentiments of other Men, he might from many Authors have been taught a very distinct Signification to this Term; and particularly by Dr. Mead, in the Preface to his *Imperium Solis ac Lunæ, &c.* which would have prevented his writing in this confused, unintelligible manner; and his endeavouring to draw other People into Contradictions, that are very consistent with themselves, in the Judgment of all who understand them. For Dr. Freind, whom he thus charges, on account of having spoke in favour of *Theory*, and against *Hypotheses*, has very distinct and different Meanings to those Terms; and is very consistent and intelligible in the Use of them to all, unless such as Dr. Woodward, who reads as well as writes without Ideas.

BUT

BUT let us now turn to this Gentleman's Hypothesis, and see whether he is any more consistent in the Thing, than he has been in the Use of the 'Term. We are told, That † *the first Scenes, and the Beginnings of all things, good or bad, to the Body, are in the Stomach—barring exterior Accidents.* If by exterior Accidents are meant any Causes of Good or Bad from other Parts, then the Proposition stands thus; *The Beginnings of all things, good or bad, to the Body, are from the Stomach, except what comes from other Parts:* which is a Discovery no body envies. But if exterior Accidents are Casualties only, then the Proposition cannot be true, because the *Beginnings of Good or Bad to the Body* may be from other Parts, before the Stomach is at all out of order: and according to all, who have been allowed to have the justest Notions of the Animal OEconomy, the Lungs and Brain have the most important Offices therein, and may, by a great Variety of common Causes, be disordered before the Stomach, *barring Accidents as Casualties*, is at all hurt, or brought into the least disorder; as in Asthmatick Persons the Stomach is frequently found right in all respects, when through some primary Fault in

the Breast, the Body shall become distempered, even unto Death : And there is not one Organ, of any moment, in a human Body, but Causes may be assign'd of its Disorder, that shall extend to the Whole, in which the Stomach has a share but consequentially, and by consent.

AGAIN, † *While the Stomach prepares and dispenses DOWN into the Blood an Aliment that is wholly good and right, every thing must be so all over the Habit.* But all People acquainted with these Matters, know many Instances wherein the Stomach may prepare and dispense *down* into the Blood, &c. as the Doctor affects to term it, and yet every thing shall not be right all over the Habit ; and this from all Causes that hinder the due Attrition of such an Aliment in the Lungs and Arteries, and prevent its arrival at the several secretory Glands, of a Consistence, or Degree of Fluidity, suitable for the Detachments of such Parts, as the various Exigencies of the OEconomy require, and the Structure of the Glands is differently suited for : that is, there are many assignable Causes that shall hinder a due Separation of Bile in the Liver, of Spirits in the Brain, of

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Urine in the Kidneys, &c. all which shall greatly disorder the Habit, even when the Stomach does its proper Office of Digestion; and therefore must all those Reasonings from a Supposition of this being the original Seat of all Distempers, *barring exterior Accidents* as Casualties, be unphilosophical and groundless.

BUT next to this grand Error of making the Stomach the Seat of what, in the nature of things, it cannot be, is superadded an Instrument or efficient Cause of all those Evils which can never come there but by preternatural means. Hear what the Doctor says upon this momentous Affair: *When, by any means whatever, the Contents of this Organ are cast up, as well in Persons in Youth, the highest Vigour, and Health, as others, there ever arises, with the rest, a bilious Juice. We have Instances of this in the Vomitings that happen, especially during Storms at Sea; and after hard Drinking. 'Twill not be easily believed how great quantities of this Juice are frequently thus discharged; and this rising likewise on all other occasions, in which the Vomiting is free and effectual, 'tis evident that this Juice must be natural, and more or less of it ordinarily resident in the Stomach.*

HERE the Doctor takes the most extraordinary way to know what is naturally resident in the Stomach, that was ever yet thought of: The common way of Information is, by examining its Contents upon Dissection, where things are most likely to be found in a natural State; for a cautious Person even this way would not trust to what he there finds, in many Diseases. But *Dr. Woodward* takes his *Standard of Nature* (for so he often talks) from the most unnatural State imaginable; and judges of the Contents of the Stomach from what it throws up in a Storm at Sea, and the Agonies of a Convulsion. The like Disorders, wherein he fixes this great *Standard of Nature*, do frequently bring up by Vomit the Contents of the Bowels much lower than where the Bile does really drain into them, and sometimes even what is given by Clyster: Is therefore what is brought up at such times to be judg'd *naturally residing* in the Stomach? Would any one that talks of a *Standard of Nature*, draw such an unnatural Conclusion? There is certainly a great deal of difference between what may pass through the Stomach either upwards or downwards, and what ought to be concluded naturally to reside there, and to be the native Produce of that part.

THUS

THUS much only might be sufficient to shew from what remote Premises the Doctor draws the most positive Conclusions ; but the least Acquaintance imaginable in the Anatomy of a human Body, (*i. e.* in the Doctor's Language, *the Frame*) will demonstrate the utter Falseness of this Position. That there is a Juice naturally separated by the Glands, in the Coats of the Stomach, no one will deny ; and that this may assist in Digestion, as the Spittle does in chewing and swallowing : but then this is prodigiously different, in all its sensible Qualities, from the Bile. Anatomy, or an Acquaintance with *the Frame*, further teaches us that the Bile, which is separated by the Liver, is empty'd out into the Bowels a considerable distance below the Pylorus, or the further Orifice of the Stomach ; and that the peristaltick and natural Motion of the Gut whereinto it drains, immediately hastens it, along with its other Contents, downwards, and suffers not one Drop, or Particle, to come upwards. This is all touching the Residence of a bilious Juice in a natural State, and is so obvious a Truth, that no Man in the world ever offer'd to dispute it, till Dr. Woodward.

BUT

BUT *in Storms at Sea, and Vomiting, a bilious Juice is found in what the Stomach casts up; but every one, who has been rightly taught in these matters, knows that Vomiting is a Convulsion, wherein the natural Motion of the Stomach is inverted, so as to draw some part of the affixed Gut into Consent: if this Inversion therefore reaches as far as where the Bile has its Outlet into that Gut, some part of it will be, as it were, pump'd up into the Stomach, and thrown out in vomiting; but then this is no more the natural Contents of the Stomach, than any thing else that may be brought up, by the same means, from the lowest parts of the Bowels, as, it was before taken notice, even Clysters themselves will be.*

IN his subsequent Discourse of the Small-pox, the Doctor urges something further to prove the Stomach the Seat of a bilious Juice, from the Opinion of *Hippocrates*, That † *all Diseases whatever, that proceed from Principles within the Body, owe their Origin to Bile and Phlegm——That Bile and Phlegm are brought into the World with the Body——That Bile owes its Supply to the Meats and Drinks made use of——And that its*

† Page 90, 91.

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Redundance is from Intemperance. Before any Regard is given to the Doctor's Citations from *Hippocrates*, let it be observed, once for all, that he grievously misrepresents him: instead of his affirming all Diseases are from Bile and Phlegm, as Dr. *Woodward* makes him do, he says, || *Both Man and Woman have four kinds of Humours, from whence Diseases proceed.* And what these four Humours are, we are told by the Divine Old-Man, in the same Book; *The Seat of the Blood is the Heart, of Phlegm the Head, of Water the Spleen, and of the Bile the Liver.* Where, by the way also, we may see how the Doctor falsifies the Authority of *Hippocrates* with relation to the Seat of the Bile, as well as the Consequences from it; for *Hippocrates* expressly makes its natural Residence in the Liver. The same Authority likewise not only stands strong against Dr. *Woodward's* Integrity, with respect to Quotations, but also against the Validity of his own Opinions; for *Hippocrates* has it in the same place, speaking of the Bile; * *Its Seat, which is the Liver, draws to it whatsoever is of a bilious nature.* And if on a sudden the Bile abounds, a Person will have Pain in his Liver, and a great quantity will flow from it.

|| De Morbis, lib. 4.

* Ibid.

In which Circumstance the old Bile, by means of its Redundance, will overflow into the Stomach, whence grievous Pains will arise, &c. Does not this diametrically oppose Dr. Woodward's System? He says, the Stomach is the natural Residence of the Bile; *Hippocrates*, that the Liver is: Dr. Woodward says, all Diseases are from Bile and Phlegm; *Hippocrates* says, they are from these, in common with other Humours. And further, in contradiction to Dr. Woodward's making the Bile naturally reside in the Stomach, *Hippocrates* says, *When by Redundance it overflows into it, it occasions grievous Pains, &c.* What must we say or think of a Man that will thus collude and falsify with the greatest Authorities, in favour of a darling Conceit of his own? Had Dr. Woodward been content to put his absurd, and unnatural, System upon the Publick, with the best Reasonings of his own contrivance, it might find excuse; but to impose in this manner sham Credentials from so great an Authority as that of *Hippocrates*, will eternally lie hard upon him to get clear of. But if it was to be allow'd that some Expressions, in *Hippocrates*, favour the Opinion of some Bile residing in the Stomach, yet his greatest Admirers will never put a Point in Anatomy upon his Decision, because Dissection was in his Time little or not at all practised: so that
 altho

altho he might, and confessedly did, know the best of all his Contemporaries the Condition of a human Body, yet for want of proper Inspection thereinto he might, from the Matter brought up by Vomiting, conceive some such thing as Bile to reside in the Stomach, because he had no better means of Information : but this no way justifies a Person in the same Conjecture, who has had Opportunities of being otherwise instructed, and who may know by ocular Demonstration, from the Make and Offices of the Parts, that no such thing can be, but by Accident, and in a State of Dis-temperature.

BUT we should almost suspect the Sincerity of the Doctor's Conclusions, as well as their Justice, when he argues, that because *Hippocrates* said, *Bile owed its Supply to Meats and Drinks*, therefore the *Stomach must have its fairest Claim* *. Is not this obtruding upon us the Authority of *Hippocrates*, in a Case wherein *Hippocrates* could not, with any Justice, conclude, and wherein there is no room even to pretend he did so ? If Bile is supply'd from our Aliment, why ? And how must it be separated in the Stomach ? Because it comes up

* Page 90, 91.

from thence in vomiting, will not do, for the Reasons already given: And it cannot be separated in the Stomach, but either immediately from the Aliment, by some Action of the Stomach thereupon, or from the Blood, by some Glands situated in it for that purpose.

ON the first of those Suppositions, no Action of the Stomach can draw it therefrom, unless the Doctor supposes the Food to be there dissolv'd, as many Substances are in quiescent Vessels by Warmth, whose Parts, when in Dissolution, adjust themselves to different Altitudes, according to their specifick Weights. And this Opinion any one will think the Doctor to have gone into, who considers his Account of Vomits, and the Manner by which they bring up the lightest Principles first, and require Continuance and greater Force to fetch up the heaviest at the bottom of the Stomach. Many Places likewise, in his *Idea of the Nature of Man*, intimate the same, insomuch that upon no other Foundation can he be consistent in any degree. But then how does this comport with any tolerable Notions of the Make and Action of the Stomach? All that know any thing of the matter, are certain, that its continual Motion from the alternate Compression of the Muscles in Respiration, is so great, as
cannot

cannot admit of any such Separation of Fluids therein; that how far soever the Aliment is dissolv'd in the Stomach, and how much soever it consists of different Parts, they are so strongly shook together, as to wash over the Pylorus in one seemingly uniform Fluid, or remain till they are divided enough so to do. By this means then the Stomach has no *fairer Claim* to the Bile, than any other Part of the Aliment.

IF therefore, on the other hand, it goes on with the common Current, and is separated into it by any particular Glands from the Blood, as it circulates thro its Coats, it lies upon the Doctor to point out those Glands, and shew such a Secretion to consist with the Laws of Circulation, as is practicable with all the natural Secretions. But this Notion suits not with the Doctor's Expression, of the Stomach's having the *fairest Claim* to the Bile, because this way any other Part has as *fair a Claim*, thro which the Blood circulates.

BUT the Objections to this Opinion of Dr. Woodward's, arising from Anatomy and ocular Demonstration, are not all that stand against him; for the Observation and Experience of all witnesseth, that when Vomiting
continues

continues so long, or is so much aggravated, that Bile is brought up thereby, the Sickness at Stomach grows intolerable, insomuch as to leave no possibility of imagining that Part to be its natural Residence, but rather that those forcible Convulsions have fetch'd it up much lower, from its real Seat. From this Observation only, I say, no one could be mistaken in this matter, who is not gone into the utmost Fondness and Bigotry to his own Conceits, and has a Scheme to support at all adventures. Can any Persons believe the Stomach naturally to contain what immediately affects it in such a manner, as sickens a Person almost to death, and brings on the strongest Convulsions? Let the Doctor appeal to his own Patients only in this Case, if he will not be otherwise convinc'd.

HIS accounting for this Disorder, upon the working of a Vomit, and raising thereby the Bile into Action, that was suppos'd before to lie quiet, which it is very likely he will do, because the Tenour of his Language imports as much, will by no means answer, because it is inconsistent with the natural Action of the Stomach for Matter so quietly to lodge therein, for Reasons above given.

M A N Y

M A N Y other Parts of the Doctor's Hypothesis, respecting the Bile immediately, might be taken notice of, wherein he contradicts both ocular Testimony, and the Sense of all Mankind, since Anatomy has given the proper Lights into this matter ; but it would be too tedious, and this may be sufficient with all who are Judges, or will be at the pains of a little Consideration. One Passage however must not by any means be pass'd over, where the Doctor is speaking in favour of Vomiting ; and inveighing against Catharticks, he has this remarkable and entertaining Expression : * *The Mechanism of the Body makes clearly against Purging. How great a Paradox it is to thin this MORBID MATTER ; to rouse it, and send it into the Guts ; to TRAIL it, for the whole Length of them, before the Orifices of all the Laeteals, &c.* The morbid Matter is here the bilious Juice in a distemper'd State, because That only he charges all along as the Agent and Cause of all Mischiefs to the Body ; mind then how insufferably fatirical he is against those who give Purges, because it *trails* it the whole Length of the Guts, and before the Orifices of the Laeteals ! This must be own'd unanswerable ;

* Pag. 211.

for what signifies it, after such a *Flush* of Conceit, to tell the Doctor over and over, that tho the Bile has nothing to do in the Stomach, where he places it, for the sake of his Vomits, yet its natural Residence, when press'd out of the common Cystus or Gall-Bladder, is in the Bowels; that it naturally, in a State of Health, *travels* thro the whole Length of the Guts, and before the Orifices of the Lacteals too, and thereby answers several important Exigencies of the Oeconomy: What signifies it, I say, to urge such dull and palpable Truths as these to the Doctor? they are things common, and obvious to the Notices of all, and would be injuriously introduc'd into such a Train of Cogitation, as the Doctor has here publish'd.

BUT in the common way of thinking, if we find that all the *Beginnings of Bad to the Body*, are *not* from the Stomach, and that the Bile is *not* a natural Resident there; what must we say to an Hypothesis that is supported by such Conjectures, and without which the whole Superstructure must sink? Dr. *Woodward* would certainly have done well in weighing these Matters better, before he had ventur'd so far; and to have had so much regard to other Peoples Understandings, as not to have put upon the World an *Idea of the Nature of Man*, which is inconsistent

sistent with the Nature of things, and repugnant to the Sense and Experience of all Mankind.

BUT it must be suppos'd for a while, that the Doctor is in the right about his bilious Juice, that we may see what he will make of it. And first, † *The Meat sent down into the Stomach, is there received by this Juice.* Here is a notorious Deception and Impropriety of Speech, because in no adequate Sense can any Juice there receive the Food into it, unless there were Quantity enough for the Food to be immerfed in it, as in a quiescent Vessel, which is known to be impossible here. The Food in some measure may indeed be said to receive the Juices of the Stomach, as by the Action and Concussion there, they are by degrees taken up by it, and mix'd therewith into a common Fluid. But this Juice must be the principal Agent in every thing, and therefore also it *contains in it Salts of differing Nature, sweet, muriatick, ammoniack, bitter, acid* ||. What Ideas the Doctor has to these Terms, I know not. It was a Remark of Mr. Locke, that we wanted Words to some of our Ideas of Taste; but it is to be fear'd here are Words without Ideas, without such at least as are expressive of those sensible Qualities, whereby the physical

† Pag. 3.

|| Ibid.

Agency of the thing can be determin'd; and all Physicians now-a-days, unless Dr. *Woodward*, take care to use only Terms as may be so expressive, because otherwise they teach nothing. *These, however, when rightly constituted, and each in due Proportion, act upon the Meat, dissolve, digest, and reduce it to a thin Jelly* *. By what physical and known Quality do they thus act? If they will do this out of the Stomach, upon the same Subject, it is to be accounted for as are the Operations of all other Dissolvents; but if they will not do the same out of the Stomach, it is a deceitful way of talking to say, they do it there, without any mention of the other Causes, or those which concur at least in bringing about this Effect. As in all the other Instances yet taken notice of, the Doctor shews himself a great Stranger to the *Frame*; so in this Point he is grievously out, to speak of Digestion in the Stomach, without any manner of regard to its natural Motion, which now all Anatomists and Physicians allow to be the chief, if not the sole efficient in this Affair.

AGAIN, *By their Actions and Conflicts, a Heat is excited, Fumes and Steams are rais'd* †.

* Page 3.

† Ibid.

No Mortal has a Notion of this in a State of Health, but when such happen, place them to a Disease, which is troublesome enough too. But there is something for these Steams to do; *They huff up the Stomach, and keep it in a moderate Tension and Inflation* *. Is this again consistent with any Notion of the forcible Contraction and Pressure the Stomach sustains by the Muscles alternately acting in Respiration? The Doctor can have no Notion of this Matter so necessary to the OEconomy, or else he would never talk of blowing or huffing up the Stomach in this manner, like any Bladder taken out of the Body, and in open Air.

Y E T hear further; † *By this means it is made somewhat to bear and press on the Parts all round: and in particular on the descending Trunk of the great Artery; which being RAISED UP THITHER FOR THE PURPOSE, is so plac'd on the Ridge of the Back-Bone behind the Stomach, as to be subject directly to its Impulse, Action, and Modulation.* I cannot imagine what is meant by *raised up thither for the purpose*; but the Doctor it seems will take as great a Liberty in making the *Frame*, as he has done in contriving the chief Agent to actuate it; and

* Page 3.

† Ibid.

the Artery being on the Ridge of the Back-Bone, is absolutely false, because it is never placed but on one side of it, here, as well as all along the Spine, unless when, in looking for it, it be drawn with the Parts to which it is connected by force upon the Ridge, as it may very easily happen to an ignorant Enquirer.

AGAIN, † *In proportion as the Stomach bears on this Vessel, more or less, and straitens it; and more or less impedes the Descent of the Blood: so that the Discharge out of the Heart being equal, a greater Quantity is sent to all the Parts above this CURB; particularly to the Brain, to answer the great Ends of Nature there, in every Exigence of that important Organ.* That when the Stomach is distended with a fresh Meal, or by Accident inflated beyond its usual Dimensions, it will bear so much upon the great Artery, as to determine a greater Quantity of Blood to the Brain, in proportion to what goes downwards at other times, is what Anatomists frequently mention; and Dr. Woodward might easily have learned thus much from Dr. Mead, in his *Essay on Opium*, where he accounts why a full Meal occasions sometimes Drowsiness. But that the bilious Salts in the Stomach, without the par-

† Pag. 4.

ticular Circumstance of a full Meal, should huff up the Stomach for this purpose, is very strange, and greatly improbable ; because in a uniform State of Health, when this *Beginning of Good to the Body* is from the Stomach, the Stomach will be always equally distended or *huffed up*, and consequently a greater Quantity of Blood always sent up above this *Curb*, which sounds but very oddly for such a State.

BUT the Brain may want this extraordinary Provision : * *For the bilious Salts, besides the Parts they act in Digestion, concur to the Production of the Phenomena that attend the Passions, Joy, Grief, Fear, Anger ; and by the Regulation of this Tension of the Stomach, and of its Action upon the Artery behind it, to the Modulation of the Brain, to the Exertion of the Senses, and of Cogitation.* *SPLENDIDA BILIS!* Incomprehensible Dr. Woodward ! Well might a great many ordinary Philosophers, such as *Cartesius, Malebranche, Locke*, and the like, puzzle themselves, to bring Matter and Thought together in vain ; they thought not one jot of the Bile, that's certain, but as it gave them Chagrin and Uneasiness. Dr. Woodward indeed does not make it a thinking Principle, strictly speak-

* Ibid.

ing, but he makes it somewhat more, if possible; he makes it *regulate the Tension of the Stomach*; and that Tension, by acting on the Artery behind it, to modulate the Brain; and that Modulation, to exert Sense and Cogitation: so that the whole *Affair of Thinking* is under the Influence of this Principle in the Stomach. This is such a Train of Thinking as quite confounds me, because I cannot possibly see the Cause here assigned to be at all adequate to the Effects: For suppose the different Extensions of the Stomach, and its Pressure thereby upon the Artery, hath a considerable Influence upon the Brain, and the Actions of the Mind; yet such Extensions are determined by Causes, much more probable and efficacious than that here assigned: Besides, it is impossible to imagine how a fermenting Mixture should preserve such a continued uniform Expansion as is here pretended; for by what there will be occasion presently to mention from the Doctor's System, it will appear, that the Stomach is thus *huffed* up uniformly in the same Subject at all times, except in Sleep. Let any one, who has been used to Experiments of this kind, imagine, if he possibly can, what Principles will support such a *Luctus* or Conflict in a Part circumstanced as the Stomach, without being liable, by all the Changes that continually happen to this
Part,

Part, to be interrupted. The Diversity of what is frequently put into the Stomach, one would think, must strangely disturb this *buffing Principle*; and what a fine Condition then must the *Affair of Cogitation* be in, that is liable to such precarious Influences?

THIS Misfortune the Doctor himself seems to be indeed well aware of; for he says, * *This so surely depends upon the Stomach, that it never succeeds rightly, while either by reason of the Deprivation of the bilious Salts, or some other Cause, things are put into a Perturbation there: or while, on account of intemperate Eating, or excessive Drinking, the Salts are so much engaged in digesting the over-great Charge thus made upon them, as to have liberty to assist in the Affair of Cogitation.* But how comes it about, that this Principle, which is supply'd by the Aliment, should be most defective when there is most Aliment taken in? Thus preposterously inconsistent is this Gentleman with himself! The Principle of Cogitation is supply'd by the Aliment, and yet the Aliment disturbs the *Affair of Cogitation*. But it may perhaps be the Doctor's meaning, that the Bile separated from a former Meal, and residing in the Stomach, *buffs it up*, and assists

in the *Affair of Cogitation*, till another Meal is put into it, and then it desists from its former Office, and turns to that of Digestion, which finished, gives a fresh Supply of Bile to go on again with thinking; so that the Bile, it seems, cannot do both at once. And the Doctor allows, That † *where these Salts are too long and intensely employ'd in Cogitation, the Digestion is neglected, and so the Nourishment render'd imperfect. For which reason, Scholars and Men that give themselves up much to Thought and Study, are ordinarily lean and consumptive.* Be it so; but how must we then account for those Constitutions that are very lean, that abound with Bile, and eat a great deal, which are common, and yet employ little or none of their Bile in Thinking? and those likewise who are very corpulent, yet study much, and eat sparingly, for such too there are to be met with? But the Absurdities and Contradictions in this Hypothesis are numberless. Any Person who has an Inclination to be an Hypothesis-Maker, need not be discouraged; for after this rate *every Thing* may be said of *every Subject*, and a Person may as much as he pleases talk about Causes and Effects, without any regard to the Relation or Fitness of the one to the other.

WE have many learned and intelligible Accounts of the Bile, and its Ufes in the Animal OEconomy, by Anatomifts and Phyficians; and from them we learn no more than that it is altogether feperated in the Liver, and thrown out into the *Duodenum*, fome diftance below the Pylorus, where it continually drains down into the Bowels, and is as a natural Purge, from its known and obvious Qualities, both helping to divide and attenuate the Contents of the Bowels, and to irritate their Motions downwards. This is the main of what the wifeft yet pretend to know of this matter, and it is all that the Nature of the thing feems capable to admit of. Who then could ever imagine that a Perfon, for the fake of making an Hypothefis, would bring it from its natural Refidence, and place it in the Stomach, to do all the prepofterous Feats already taken notice of?

BUT in compliment to his own particular Turn of Thinking, the Doctor is pleafed to fay; † *Persons of the finer, quicker, and more delicate Constitution, have fome Perception of thefe Operations on the Brain and Senses; indeed very great*

† Page 5:

and distinct, when the biliose Principle, increased, acts with a more than ordinary Power. As to those who have little, or perhaps no such Perception, distinctly, if they please to have patience till Evidence can be produced of it from various Methods of Proof; and, in particular, from what others perceive and observe; they will, I hope, in due time have fuller Satisfaction in this Affair. Indeed I must own my-self under a total Absence of all this Delicacy of Constitution, and without any Perception of these Operations of the Brain, and Senses; even tho the biliose Principle is to my Certainty very often increased. And the worst is, that, according to the Doctor's own Notion, I am never like to have fuller Satisfaction in this Affair: because if I think much about it, the Bile will be so much diverted from the Office of Digestion, and the Stomach be at length so deprived, by that means, of its due Supply of Bile from the Aliments, that the Affair of Cogitation may quite cease, and all Perception be utterly lost. For it's certainly a Consequence from the Doctor's Scheme, that a Man may think himself into a Blockhead, and eat himself into a Wit: for as thinking much will cut off the Supply and Increase of the Bile, the thinking Principle; so will eating heartily, and thinking not at all, so increase this Principle, that a Man will be of a delicate
Consti-

Constitution, have Perceptions of Operations on the Brain, and all that, without striving for it. So that Thinking, strictly speaking, is not an Action of the Mind, but a Passion wherein Bile is the Agent; and the shortest way to Knowledge, and to make Hypotheses, is not to strive and think, but to eat for it: tho in such manner, that it may produce a well-constituted Bile; or else instead of useful Acquirements we may learn Atheism, Sedition, and I know not how many mischievous Tricks, as we shall see further. A fine System indeed for our Universities! which if it prevails, must render Studying the most pernicious thing in the world, and a proper Regimen of Diet the only Means of coming to that Delicacy of Constitution which gives Perceptions to the Brain.

THUS much for the Bile, as it assists in the *Affair of Cogitation*; let's see what the Doctor next does with it: † *The Aliment, the Meat, digested, and diluted with Drinks used, passing out of the Stomach, by the Pylorus, into the Gut Duodenum, besides what it carries out along with it, takes up more of the biliose Juice, discharged in by the Duct from the Liver, there in the way on purpose. This continues more to heat, dissolve, and act*

† Page 5, 6.

upon the Aliment. Here the Doctor is pleased to allow another natural Residence for the Bile, from the Liver, in the way on purpose; and I am very glad to find he will vouchsafe to think in any respect like other Men: yet after this Condescension, he resumes himself, and goes on; † Being moved, still on, along the Guts, by their peristaltick Action, the finer and thinner part of it, by means of the slight Opposition and Stops, made in the Guts by the Steams and Flatus arising from the Conflicts of the biliose Salts, is turned cross-ways thorow the Lacteal Vessels, and the Thoracick Duct, into the Blood; and so circulated with it, and thrown about the Body. Now the Stops made in the Guts by the Steams of the bilious Salts, is a Redundance of Employment very needlessly allotted them, because the Make and natural Situation of the Guts unavoidably furnish them with such Stops. The Doctor is so fond of his Bile, that he not only employs it to do many things in his Hypothesis, for which he really stands in need of its help, but assigns to it what is manifestly from other Causes. Any other Person that looks into a Body, would as soon assign the Convolutions and Stops in the Guts to a Shower of Rain, or a Knock in the Cradle, as to the Bile: but the real Cause

is so obvious, that no one can overlook it, that has not an Hypothesis to support. If the Bile was the Efficient herein, the Removal of that would let the Guts unfold and become strait: but every one knows this to be impossible in a natural State; and therefore that to insist upon this as the Cause, is absurd and ridiculous. If the Doctor means any Stops besides what are thus naturally and inevitably in them, he should have been so particular as to have said so; but for the Purposes of the OEconomy, and to strain the Chyle through the Lacteals, the natural Convolutions and Stops are known to be sufficient.

BUT if the Doctor is not duly acquainted how this Contrivance is order'd naturally, or does not think that such Causes are equal to the Effect, he lies under the same difficulty here, in blowing up the Intestines into Inequalities by the help of his Bile, as he was before, in *huffing* up the Stomach with it; because they are continually under the Influences of much more powerful Causes, than the Expansion of a *colluctuating* Fluid can be imagined to be. Besides, the natural Vent there is for any Vapour or *Flatus* either in the Stomach or Bowels, would not suffer such Effects as here assign'd to arise from them, because they would always be

be breaking away upwards or downwards: so that this *buffing colluctuating* Principle would also furnish us with a great deal of Musick too, as well as *Perceptions on the Brain*, and other *Delicacies of Constitution*. *Cross-ways, through the Laeteals, and the Thoracick Duct*, are very awkward Expressions, and no ways suitable to the thing to be signify'd; as does also being *thrown about the Body* very ill agree with any just Apprehensions of the Blood's Circulation: but whether such Uncouthness is from Ignorance or Affectation, I shall not undertake to determine. † *Gradually surmounting and descending*, is likewise of the same Turn, and gives one as good a Notion of the natural Motions of the Bowels, and their Contents, thro them, as Inconsistency and Contradiction is capable of.

THE next Advance of the Doctor is stupendous: *In Sleep the Pylorus being near closed, the Communication between the Stomach and Bowels by that means in great measure intercepted, and the Descent of both the Aliment and the biliose Juice, the Principle and Instrument of Animal Action, and of Sensation, being impeded for the time, much of the Action in the Frame is, of course, remitted, and suspended. Sensation is so likewise: and the Organs*

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come to a greater *Quiet, Ease, and Rest*. The Closure of the Pylorus in Sleep, is a matter assumed only to serve a Turn, and is so far from agreeing with the natural Mechanism of the Parts, as to be contradictory thereunto. We are taught by Anatomy, that the Pylorus is girt with a kind of Sphincter; and it is well known that Parts so constituted are in a relaxed state during Sleep. How surprizing then is it in Dr. *Woodward* to put it into a very opposite State, not only without assigning any thing like a Reason for it, but even contrary to Reason and Nature!

BUT here is an End in this Contrivance, to intercept the Communication between the Stomach and Blood, because impeding the Descent of the biliose Juice, suspends Animal Action and Sensation. But how does this agree with what the Doctor assured us of before, that the Bile buffing up the Stomach, pressed upon the great Artery, and by its Modulation assisted in the Affair of Cogitation; and now again shutting it up in the Stomach, suspends Animal Action and Sensation? The Doctor may plead his Right to Hypothesis-making as much as he pleases; but to lead People into such a Maze and Wilderness of Contradiction as this is, and make it necessary to be answer'd to, does not at all comport with that Regard

he † expresseſſes for his Country, and the Good of his Fellow-Creatures, in ſome parts of this ſingular Performance. It's an irkſome Office, and ſuch Demands ought to be diſcouraged, for the publick Eaſe. It was troubleſome enough to examine all the Doctor's Pretenſions about what the Bile did in the Stomach; and we find a great many things aſcribed to it, nay the moſt important in the OEconomy, which were thought impoſſible for it to effect: but now the Doctor has ſhut it up there faſt, that the *Action of the Frame* may be ſuſpended, and all thoſe fine things ſtand ſtill.

HOWEVER, all that part of what the Bile does in the Stomach, ſhall be laid by as a Miſtake and an Inconſiſtency, and we will begin again, with that which eſcapes into the Blood.

THE Bile then being ſhut up in the Stomach during Sleep, || *the Organs and Parts have an opportunity of ſeizing and detaching, out of the common Stock, ſuch Corpuscles as ſerve peculiarly for the Suſtentation and Nouriſhment of each; this important Work being carry'd on chiefly in Sleep.* Juſt before, by the very ſame means, it was told,

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the Organs were got to *Ease and Rest*; but now it seems that *Ease and Rest* was only for a better Opportunity of seizing, &c. but it may be believed that this Contradiction is more in the Manner of Expression, than in the Understanding, and that by *seizing*, &c. the Doctor means only *receiving* such Corpuscles; yet this is a Privilege allow'd but to few, and the Doctor, it is to be hoped, will receive it as a Favour, in having the particular Liberty granted him of confounding Patients with Agents, or Agents with Patients, as much as he pleases; so that the Reader can but guess at a Meaning that comports with Truth. The * *Glandules taking forth Matter from the Blood subservient to various Uses and Ends*, shall also be placed to the same account, because there is something intelligible aim'd at, tho absurdly express'd.

THE Doctor's † Account of Secretion differs not greatly from the common Opinions, if told in the plain way of speaking; but the Bile again surprizes us: *The nutritious Jelly, attended with the various Salts, above recited, from the Stomach——quitting its pale transparent Hue, becomes of a red Colour, paler or deeper, upwards almost to black, answerably to the greater or lesser*

* Page 7.

† Page 8.

Quantity, and to the different Proportion of the several kinds of those Salts. Now how a red Colour should result from a Mixture of Salts that were none of them of that colour in a state of Separation, is hard to conceive, and altogether new. It has been conjectured, and such Conjectures have been supported by great Probability, how that part of mix'd Bodies call'd *Sulphur*, by its various Modifications, and the different Manners of its being acted upon, puts on different Colours, and in many Instances becomes red; but it never yet seems to have enter'd into the Thoughts of any Person besides *Dr. Woodward*, that the Principle call'd *Salt* had any share in such Changes: and whoever considers this matter, with due regard to the natural Properties and sensible Qualities of these Bodies, will hardly be ever brought to conceive how a Salt can do this. However, this is not a Matter of any great moment to Practice, for the Advantage and Improvement of which every Inquiry of this kind ought to concur, and principally be aimed: Tho in a Matter of mere Speculation one would rather go into a received and well-grounded Opinion, than a mere Novelty, and an Hypothesis. So that the ordinary way of accounting for the red Colour of the Blood from the known Office of the Lungs, is like to continue, notwithstanding

standing this extraordinary Discovery of Dr. *Woodward*. The Colour of the Skin likewise shall be pass'd by, as a matter of no great concern.

BUT next follows something of consequence: *By the Colluctations of those Salts, and the Effervescence consequent thereunto, continued in the Blood; this and the Parts of the Body, as it passes through them, are kept constantly to a due Heat.* This is again intirely the Doctor's own, for it is repugnant to the Notions of all other Men, who have wrote upon this Head, unless some chymical Hypotheses-Makers, who knew nothing of the Mechanism of a human Body, and made their Laboratories and Furnaces the *Standards of Nature*, and who have been long since exploded. If Dr. *Woodward* understood the Laws of Circulation, and what Motions the Parts of the Fluid are capable of in such a Circumstance, he would have known that there can be no such thing therein as Colluctations, Effervescencies, and the like; because such Motions arise from physical and sensible Qualities, which they are not capable of being determined by in a state of Circulation, so swift as is that of the Blood. Let the Doctor but read what Dr. *Pitcairne*, and many others, have said upon this Head, and then make Col-

lutations of Salts, and a circulating Blood, consist together, if he can.

FROM the same Great Man may the Doctor also learn other Causes of this Effect, much more consonant to Reason and Experience, than these hypothetical imaginary Salts. He may be taught from him, that the Heat of the Blood is from its Circulation; and that therefore it is always in proportion to its Quantity, Celerity, and Distances from the Heart. But a Heat from the Collutations and Effervescencies of Salts will not answer; for this Cause would be most intense where the Blood has the least Motion, because they are then at liberty most to obey those Properties by which they fall into such Motions; and on the contrary, where the Blood has the greatest Motion: both which every one's Experience contradicts; insomuch that the most Ignorant know, that where the Blood moves fastest, there is the greatest Heat, and where slowest, the least. Besides, if the Doctor's Principle was true, the Blood drawn out into a stagnant Vessel, would continue its Warmth the rather for that reason, because the Salts would not be hinder'd, by any other Cause, from fretting thus, and heating together; whereas it grows quite cold, as soon as any other Fluid of equal Consistence,

sistence, that has none of these Salts in it. The Doctor has here therefore been so unhappy, as not only to assign a wrong, and an insufficient, Cause of this Effect, for the sake of supporting his bilious System, but also discover'd at the same time a surprizing Unacquaintance with the true Springs of Action in the OEconomy ; in a Case too that is so plain and obvious, as to be capable of Demonstration almost to the meanest Capacities.

THESE Salts, he further says, * *by their Agitation, and the Flatus and Steam that here also attends, the Chyle, introduced and turned into the Blood-Vessels, is frothed up into the form of Bubbles, or, as they have been usually call'd, Globules.* Here the Doctor is himself aware of the Insufficiency of his Agent, and therefore calls in a *Flatus* or *Steam* ; but how this *Flatus* or *Steam* arises, we have no Instructions, but from the Colluctations and Conflicts of the Salts : yet thus it ought to have been particularly explain'd, for every one cannot conceive how the Colluctations of rigid Bodies, such as are those of Salts, should strike off any Particles that are elastick, in such a manner as to blow up a viscid Fluid into Froth. These Globules in the Blood are certainly a

* Page 9, 10.

thin Shells or Coverings, containing something that is capable of Compression and Restitution, because we know that in the Capillary Vessels they recede by the Compression of the Passage, from their Sphericity, and become Spheroides, or of oblong Figures; and that as soon as they are again got into more open room, they resume an exact Sphericity: is it possible then that the Contents of such Globules can be any Parts of rigid Bodies, such as Salts? This *Flatus* or *Steam*, the Doctor speaks of, must be from some Particles of the Salts themselves, broke off in their Conflicts, or some Parts of the Chyle capable of being raised into an elastick Steam; but we know of no such Parts in the Chyle, unless what comes from any Mixture of Air therewith: but if so, what occasion is there for the Novelty of these Salts in this Affair? The springy Particles of Air so circumstanced, would without any help from such imaginary Aids, by their known and natural Properties, form such Globules. And this is what many Learned Men have long ago demonstrated. This Confusion then of the words *Froth*, *Bubbles*, and *Globules*, as signifying the same thing, is to be placed altogether to the Doctor's Unacquaintance in this matter; for all other Persons know, that the Globules in the Blood do really constitute its red Part, and
bear

bear so little likeness to Froth, that their Existence has no dependence upon such a Circumstance, for they are necessarily in the Blood at all times, without any means used to *froth it up*. Whatsoever fine things therefore the Doctor may hereafter think fit to do with these Globules in the OEconomy, it must be all allow'd fallacious, because he is wrong in their very Production. After this manner indeed I cannot see what may not be brought about by these Salts, that the Doctor finds for his purpose to employ them in.

THE Doctor says, these Globules * *expanded, and in turns contracted, in the Blood-Vessels of the Muscles, are the Instruments of Muscular Action*. What use indeed some Persons have made of these Globules in explaining Muscular Motion, cannot be a Secret to any who are conversant with such Studies; but certain it is, that Dr. Woodward can have no right Perceptions of this matter, because he is so grievously out in the Formation of them. And his great Mistake in this Case will further appear, by what he goes on to say: † *One Instance of the Greatness of their expansive Power we have in Blood just let out of the Vein into a Receiver;*

* Page 10.

† Ibid.

out of which the Air being exhausted, and so the exterior Pressure taken off, these Bubbles, of very small, instantly swelling and growing bigger, become incredibly large: and indeed the greatest part, if not the whole Mass of Blood, rises up into such. For all this is true only of the elastick Particles of Air which lie wrapped up in the Blood, and open on the removal of the Power that compressed them, viz. the Weight of external Air; and this is the Opinion and Language of all who have discoursed hereupon: but no body from hence can have any Notions about a bilious Salt, or imagine that such a Cause could have any influence over these Effects. And this amazing way does the Doctor often take, to explain Matters, by the intercourse of Principles or Agents, that are by no means wanted; which shews either an intire Unacquaintance with what has been taught upon such Heads, or a strange Inclination to differ from all Mankind, and substitute in the room of received and well-examined Opinions, Conceits and Guessees of his own. The Learned would after this rate have a fine Task upon their hands, were they obliged to be thus called off from known and well-established Truths, to give attention to every new Figment, as often as any one has a Passion to become considerable by Peculiarities and Contradiction. All who
have

have it generously at heart to promote useful Knowledge, before they make Essays in any particular Point, shew that they have examined what was before extant thereupon, and offer some Reasons for their Dissatisfaction therewith. But Dr. *Woodward* has acted very differently in this Instance ; he has overlooked a great deal said by others upon the same Subject, and put off a Conjecture of his own, with the Air and Assurance of a System of Knowledge.

BUT the Doctor goes on : † *The Globules of the Blood, with the Aura or Vapour arising from the reciprocal Conflicts of the biliose Salts, serve placidly to distend the Blood-Vessels in all parts, and to render these capable of Feeling, and Perception of exterior Objects, &c.* Now it is very well known, that the least Alteration in the Distension of the Blood-Vessels is of very great consequence ; can any one then imagine, that the wise Author of Nature should put a matter of such moment upon the most precarious foot imaginable ? And nothing can be more precarious than the *Halitus* or *Vapour* arising from the Conflicts of fermenting Bodies ; as is well known to all who have but slightly been informed in such matters. Besides, it has been

† Page 12.

already shew'd, that such Conflicts arise from Causes, that are inconsistent with their Agency in a circulating Fluid.

BUT let us attend the winding up this extraordinary System, called, *An Idea of the Nature of Man*. All things being in due plight, and thus harmoniously concurring, compose such a Mechanism of the Frame, and produce such an Operation, as animates and enlivens it, &c. so long as it does that, it is in a good State of Health. Here we have Mechanism used with as much Impropriety, as has been before shewed in the word *Hypothesis*; for it is capable of no other signification, than a System of Matter put together, and operating by those Laws of Motion which are taught in *Mechanicks*, and are deduced from the sensible and known Qualities of Bodies: but it appears by an Examination of this System, that there is no mention therein of the manifest and sensible Qualities of the Bodies, concerning which it treats; nor is there the least Hint of any Law by which those Bodies are governed in their Motions; but quite on the contrary, the Qualities of every thing are imagined only and supposed, and material Agents are put upon Offices, directly contrary to, and inconsistent with, the known Laws, by which

which such Agents are by the Author of their Existence bound to act. And yet the Doctor has the Weakness further to add ; *They who have Capacity rightly to comprehend such a System, and the compleat Constitution of such a Machine, must readily allow it a Work truly worthy of the great and wise Author and Framer of it.* It will be readily allowed, *that System, and that Machine,* which Dr. Woodward has here made, is worthy of *the Author and Framer* of it ; but that System and Machine, which every Man in reality carries about with him, is quite another thing, and knowable by a very different Application of the rational Faculties, and a very different Means of Evidence from what is here used. For the clearer Illustration of which, before we leave this Head, let us take a short Review of the Doctor's main Principle, and compare it with that which other Physicians found their Reasonings upon.

THIS System is supported by this grand Proposition, *That Bile, or a bilious Juice, is the Principle and Instrument of animal Action and Sensation.* Others say, *that certain Requisites to preserve the Fibres in a State of Elasticity, or an Elastick Fibre,* are the Cause of the same. The Doctor manages his bilious Juice arbitrarily, without any regard to those Qualities that are the

the natural Result of its mechanical Affections, Figure, Motion, &c. Others argue from the known and demonstrable Properties of an elastick Body, and consider all Motions in the animal OEconomy, by the same Laws as hold good in all ordinary Systems of Matter. The Doctor frequently draws Conclusions, inconsistent with, and contradictory to the natural Powers of his Instruments; but others never conclude against the received Laws of a material Agency. The Doctor's is therefore arbitrary, inconsistent, and absurd; the System of the others natural, reasonable, and truly mechanical.

THE Liberty of framing an Hypothesis, is what the Doctor has asserted his Right to with some Warmth, as was before taken notice; and no one will pretend, as I know of, to abridge him of it, but every one that uses his Understanding, will judge whether he makes right Deductions from that Hypothesis. He may suppose whatsoever he pleases about the Bile, or any other Humour in the Body, that is not repugnant to Nature, and the Laws of Motion; but when in wantonness of Fancy he transgresses those Bounds, all Mankind have an equal right to contradict him, and shew his Absurdities, without deserving to be thought invidious,

invidious, and jealous of his Merit. Having used therefore this Freedom with his *Idea of the Nature of Man in Health*, let it also be examined what use he makes of the same Principles, in giving such an Account of *Diseases*, as may support a very singular Practice.

IN the beginning of this Part, the Doctor recites several ways by which the bilious Salts may be changed from their natural State; and in that Condition makes them the Causes of various Diseases, in the same irrational and immechanical manner, as he before used them in carrying on the natural Functions: For which reason the Reader shall not be troubled, unless with the most uncommon and surprizing Strokes of Reasoning on this Head.

WE are told †, *The Body is affected, and the Organs perform, just as the Instruments that work on them happen to be disposed, and to act.* Now this is still carrying the Mind off from that Mechanism, whereby the Body comes to be a System of Motion within it self, to a foreign imaginary Agency, that consists no where but in Hypothesis. The Body is certainly affected

† Pag. 15.

and altered by external Causes, and that in various Manners ; but when a Person undertakes to talk about It as a System, or a Piece of Mechanism, whereby its particular Constructure gives it such certain Dispositions, every thing foreign thereunto ought to be rejected. But the Agents the Doctor here introduces are Casualties of this System, even the bilious Salts ! I cannot think it a Departure from *seriously* examining this Scheme, if I should attempt a parallel Hypothesis, to account for all the Motions in the greater World from the Smoke of a Chimney, or any such like *Halitus*, *Steam*, or *Vapour*. There may be a thousand Instances, wherein this may be made as adequate a Cause to the Effect, as the Doctor's Bile is to what he ascribes to its Agency. Where any one speaks of *Organs*, and *Mechanism*, and *Frame*, one would expect somewhat really mechanical, and to see a Fitness and Necessity between Causes and Effects, from the natural Constructure of the Instruments of Motion to one another ; but here the Doctor makes the Instruments and Principles of Action, Parts that are capable only of being moved by other Causes, and such Causes too as have been shewn impossible to take place in a living Body, as they tend only to Fermentation and Corruption. We have not here, in this whole System, one
Hint

Hint concerning the Shape, Constructure, and mechanick Force of any organical Part; but only a mention of *Organ* and *Frame* in the gross, and a great deal about a foreign imaginary Power to set the whole at work: so that hereby the Doctor has it in his liberty to use these Instruments as he pleases.

PURSUANT to this, he goes on to say, *The Salts are sometimes so vitiated, and so exuberant, as to get the Dominion over the Patient, put him out of his own power, and subject him intirely to their Government and Insults* *. Unhappy Man! to be so organized, and so framed, to lie at the mercy of such powerful, such formidable Enemies! What avails it to have a few placid benign Intervals, and kindly grateful Sensations in all the Parts †, when the least Error in living lays us open to such Ravage, Depredation, and Insults, from the same Causes? But it would have been a great Satisfaction here, if by *vitiated* and *exuberant*, the Doctor had conveyed some more distinct meaning; for they give only a confused Notion of something not right, and are so imperfect as to any mechanical Property, as to leave us at a loss what kind of Change this is, or how to judge of the

* Page 15.

† Page 12.

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Power

Power they have over us hereby. We have been used to such a way of speaking in these matters by other Physicians of late, as continues the Mind in some measure of Certainty *how* such Alterations are made ; whether in an Increase or Diminution of specifick Gravity, in a greater or lesser Degree of Cohesion, and the necessary Concomitants of such Changes : but saying any Portion of Matter is *vitiating* and *exuberant*, will now-a-days pass for nothing, because no distinct Meaning is conveyed thereby. After this vague manner therefore the Doctor may give his Salts what Dominion he pleases, without its being worth any one's while to dispute it with him ; but to make such Causes put a Man out of his own power, entirely subject him to their Government *, and vary the Passions from one Extreme to another, is such a Transgression upon common Sense, as cannot easily be forgiven.

AND yet we are further told †, that *they obtrude Suppositions, Thoughts, and Suggestions, not only without the Concurrence, but directly contrary to the Will of the Person.* So that we have in Man not only a *Frame, Organs, Mechanism, a Will, &c.* but also a *bilious Salt* that can regulate or destroy

* Page 15.

† Page 16.

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all ; they can set the Organs at work right or wrong ; they can give *Perception to the Brain*, or make a Man *think directly contrary to his Will*. The Doctor would not perhaps take it well to have his fine Hypothesis made a Foundation for the Interpretation of Dreams, and a *Mechanical Theory of Nonsense* ; but it seems so exactly calculated for such ludicrous Purposes, that it is very difficult to make any other use of it.

WHAT is just dropt below, That * as those Salts cause these Disorders, so the Removal of the Salts, particularly by Vomit, puts an end to the Disorders ; shall be consider'd when we come to the Doctor's Practice, for which this Hypothesis seems to be made on purpose.

BUT now we come to something that has indeed a mechanical Aspect : † The Stomach, by the greater Colluctations of the biliose Salts, — being more inflated — bears up the Diaphragm, straitens the Thorax, and by that means confines and incommodes the Lungs and Heart — The Heart and Lungs, to secure themselves Freedom of Action, make continual efforts, push and thrust out the Breast, sometimes with such a force, as to render it finally more than usually big and prominent ; and

* Page 16.

† Page 17.

E 2

together

together with the Pressure of the Stomach, by degrees push out the Back, so as to make it in time gibbous and hump'd. This is the first Passage I have yet met with, where the Doctor's Expressions are reducible to any Standard; it will therefore be of some moment closely to attend to his Reasoning. Throwing out then all needless Expletives, I take the Proposition to stand thus: The Inflation of the Stomach from the Conflicts of biliose Salts, so much straitens the Capacity of the Thorax by pressing up the Diaphragm, that the Lungs and Heart, for want of sufficient room, push out the Breast prominent, and the Back gibbous.

HERE the Deformity of the Breast is the Effect, and the Inflation of the Stomach the Cause, and the sole Cause; for the Diaphragm and Heart and Lungs are only intermediate Powers, that give no more in this case than they receive; and the same quantity of Motion and Impulse which used to be exerted one way, is only more diverted another, without the supposition of any Increase: so that all the Force the Heart and Lungs exert against the Breast and Back, is in proportion only to the Elevation of the Diaphragm into the Cavity of the Thorax, and that Elevation is determined only by the Inflation of the Stomach; that is, what is more than natural in all these Powers.

Powers. To make a right Computation therefore of this matter, it must be consider'd whether a preternatural Inflation of the Stomach from the Cause assign'd, is sufficient to thrust out the Breast and Back into these Deformities, for that is the sole Agent; the Increase of Pressure against those Parts being altogether from an Increase of Power in that, because all the intermediate Powers are in a natural State, and communicate no more, as was before said, than they receive.

AS the Matter therefore thus stands, most People who are acquainted with Mechanism and Reasoning in such Cases, would have computed the Quantity of Power requisite to thrust out the Back and Breast after this manner, and whether the Cause assigned could answer thereunto, before barely asserting it to do so. But because the Doctor has not thought meet to do this, they who would have satisfaction herein will consider all the Obstacles to such an Effect; as the joint Force of all the Muscles concern'd therein, besides the natural Strength of the Parts themselves, from their natural Conformation; and then compare it with the Power assigned to conquer them. The Doctor may indeed say, that this is done only at a tender Age, when all the Muscles and Parts

are pliable and ductile; but then it must be remember'd too, his Agents are then in proportion weak and feeble.

BUT there is no need of bearing upon the Doctor for his Neglect of due Proof in this Affair, because I conceive many Impossibilities stand against him therein; and particularly from so constant and violent an Inflation of the Stomach, as must be here supposed. Such Inflation would intirely destroy all that part of Digestion which is assisted by Attrition, for the Coats of the Stomach could never come together in such a state; the common Accounts for Hunger and Thirst also are hereby utterly destroy'd: And for these Effects we are drove to the Influences of Principles that have no Agency but in stagnant Vessels, and the Furnaces of Chymists. It is also inconsistent with the Contents, or Chyle, such as it must be in this Case, going over the Pylorus into the Guts; for the whole Body of the Stomach lying lower than that Passage, such a Tension would let whatever is in it remain until it is full of Chyle, since the Flatus would be on the upper part by its natural Lightness. But these are Absurdities that are even irksome to speak of.

UNLESS

UNLESS these Inflations likewise were almost continual, which is very difficult to conceive, consistent with Life, they could never answer this Effect: For upon a Pressure sufficient to thrust these Parts out for a little while, as soon as it recedes, their natural Elasticity and Tension would bring them again into place. But the least Consideration will shew the Impossibility of this Opinion, to the meanest Capacities. The Stomach is in the lower Belly, where almost all the encompassing Parts are supple and yielding: can any then imagine an Inflation herein would not rather distend Them, even into prodigious Dimensions, than have its Effect upon a Part so distant and unpliant as the Back? The palpable Ridiculousness of this Conceit, makes it hardly excusable to be at the trouble to expose it. If it would have been any service to the Doctor's Hypothesis, to have overfilled the Bladder, by Obstruction of Urine, or blown up any other part of the lower Belly capable of Distension, the same Effect might with equal justice have been ascribed to It.

THIS System now has taken a new Turn; and as a Distension of the Stomach before did a great many fine things, so now it does a

great deal of mischief, and by the same immediate Means of pressing upon the *Aorta*. By an * Over-quantity of Blood thrown upwards, all Disorders of the Head, Breast, and lower Belly are accounted for ; and it is particularly said, that *the Commotions and Disorders of the biliose Salts in the Stomach, hinder the regular Closure of the Pylorus, in order to Sleep*. Whence again we are presented with some very uncommon Hints about *Dreams, the Night-mare, &c.* And because Sleep is necessary to Nourishment, hence also Consumptions and Leanness are deduced. † Here again the Doctor calls in some other Causes to disorder the Bile, such as *Passion, great Exercise, improper Diet, unfit Medicines, &c.* and then in a very singular way goes on to speak of it, without any regard to its physical Properties, and Necessity of Action, by the Laws of Nature ; but as a free voluntary Agent which travels at discretion all over the Body, and produces all manner of Diseases, from Apoplexies and Convulsions down to Chilblains and Kibes. Whence, reflecting with great Satisfaction, he comes to his favourite Point, of *the Causes of all Diseases being from the same Fountain, of which there has been occasion to take notice already ; and*

* Page 18, 19, 20, 21.

† Page 22, 23 — 28.

thence concludes, * *The great Wisdom, and the Happiness of Man, consists in a due Care of the Stomach and Digestion; and in rightly ordering and adjusting the Principles there.* Hereupon is founded the whole Practice of Vomits, &c. which shall be consider'd, after a short Examination of a Peculiarity the Doctor starts, about the Close of his Account of Diseases.

THE Doctor says, † *The Term of Life is set, adjusted, and measured out, by the Number of the Lacteal Vessels; and thence reciting various Causes, which sooner or later stop these up, so that a Sufficiency of Nourishment cannot get through them, he makes them the Instruments of Death.* To this let it be added, what the Doctor concludes with: *This is certain, that so long as the Mechanism of the Body holds, even the Exorbitances, Errors, and Disorders there, during Diseases, must be reducible to Laws and Rules, by those who are duly apprized of that Mechanism.* The Doctor is certainly in the right here; and it appears more so to me, than he thinks for, because hitherto there has been no manner of regard had to such *Laws and Rules*, in his whole System, both of Health and Diseases, but only an arbitrary Assertion of things, and

frequently in opposition to the known *Laws* and *Rules of Mechanism*, as has been observed in many places already. It is astonishing, that after a Gentleman has been rambling through fairy Paths, and a bewildred Hypothesis, not only without, but often in contradiction to, the proper Means of Conviction; he should adjust his Countenance, and gravely talk of *Laws* and *Rules*, and *Mechanism*. Dr. Woodward has given the Agency of every thing in Health and Disease to the Bile, but he has not said one word concerning its physical Properties, or mechanical Affections; nothing about its Figure, Gravity, or Aptitude to Motion from such Conditions: he has made its natural Residence in the Stomach, where it never comes but by Convulsion and preternatural Means; and he has made it do a thousand things contrary to the known *Laws* of Motion, and all physical Agency. His *Laws*, and *Rules*, and *Mechanism*, are therefore only Sounds; and his *Frames*, his *Organs*, his *Standards of Nature*, and his *Tests*, so frequently spoke of, are mere Delusion and Chimera.

THIS Sketch about the Lacteals is as good a Specimen also of the Doctor's *Mechanism*. Herein not only the Length of Life, but the Well-being of it also, is put upon the accidental

tal Stops that may be made to these fine Passages; without any manner of regard to the various Causes that otherwise will shorten Life, and bring on Distempers. It is certain that the Lacteals are necessary Conveyances for the Nourishment to pass into the Blood, inso-much that without them the Constitution must be at an end; but there are many other Parts likewise so necessary to the OEconomy, that no Person can subsist without them, and upon which it would be very absurd to lay the same stress solely. A Man can no more live without his Lungs, his Heart, his Liver, or any other principal Organ, than he can much after the stoppage of all his Lacteals: but it would notwithstanding be reckon'd a very novel way of speaking, to say, that in proportion to the Time in which these *Viscera* do their respective Offices, *the Term of Life is set, adjusted, and measured out*; because every one knows, that when any Part is destroy'd, without which the Whole cannot subsist, the Whole must also be destroy'd. So that Dr. Woodward's Discovery of a Stoppage in all the Lacteals bringing Death, is no better than many others before it, That when the Heart ceases to beat, or the Lungs to respire, a Man must die.

BUT

BUT it seems the Decay of Age is prettily accounted for by this Contrivance, because as the Lacteals stop up, by *Gluts sluiced in upon them*, (a Term the Doctor uses) the Body wastes, and Strength decays. Yet I am very suspicious this Refuge was for want of a true Knowledge in this Affair; and therefore as it lay upon the Doctor to account for it, he must do it by means within his compass. Would any one thus conclude an Hypothesis with the mention of *Laws*, and *Rules*, and *Mechanism*, that had given such a notorious Instance as this is, of an absolute Ignorance in those very things? For a very tolerable Notion of the Mechanism of an human Body would have accounted for the Decays of Age, and Death, from the wearing out and destruction of those Parts, that are truly to be consider'd as Parts of a Machine. The Elasticity of the Fibres, the necessary Requisites to maintain it, and the Hindrances thereunto, would presently occur to any one who considers this matter mechanically; and this, with all the Conditions of Circulation arising therefrom, would furnish out a delightful and rational Solution of this Difficulty. But these Affairs must be absolutely out of Dr. Woodward's acquaintance, because he has not made
use

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use of one word concerning them, in what naturally call'd for their Consideration, but has recourse to a Figment that has directly nothing to do in it. For altho a Stoppage of the Lac-teals must cause Decay and Death, yet there cannot be supposed an Instance in tenthousand, wherein Decay or Death is solely from this Cause. The Doctor's grand Proposition then, That *the Term of Life is set, adjusted, and measured out by the Number of the Lacteal Vessels*, is not only precarious and false, but is also a further and an additional Confirmation of what has been often already remarked, that he is intirely ignorant of the Mechanism of a human Body, and the necessary Requisites to form a true Judgment of it in Health or Sicknes.

DR. Woodward having thus carry'd his Hypothesis through a healthful and a diseased State, proceeds to consider of Remedies: And this Part he begins upon a Supposition that * *the Principles, or original Corpuscles, that constitute Bodies, never change, but continue through all Ages the same; neither has there been any one single Particle broke, nor its Figure, its Magnitude, its Gravity, its Solidity, or its Consti-*

tution in any respect altered from its first Production. This Hypothesis, it seems, the Doctor had before made use of on other occasions; but here it is drawn out against *alterant Medicines*, the Practice of which he puts upon the same foot as the common Cheats of Alchymists, in their pretended Transmutations of Metals; saying, * *Very much Gold hath been drawn forth this way.* Where by the way it may be observed, with what Decency the rest of the Faculty are treated by this Gentleman, who seems himself to be much piqued at foul Play, and unfair Reflections.

WHAT Notion the Doctor has of *Alterants*, I am not very certain; but his Prejudice against them is in favour of the *original Bile*, which is to be otherwise treated in his Practice. It is difficult to carry one's Thoughts to the *Minima Naturalia*, and into those Divisions of Matter, which lie far beyond the reach of Sense; and it is with good reason to be question'd, whether they are purely concern'd in any Compositions or Systems of Matter. For as to those *Moleculæ* or Corpuscles which grow big enough for our Senses to take notice of, and which make up the various Appearances of the

things under Inquiry ; we can, and have, very clear Notions of their being frequently altered : Medicines therefore that have those Effects, are properly deem'd *Alterants* ; and when such Changes are for good, their Application is laudable.

THE Doctor cannot well be a stranger to the Changes which are made in the seemingly constituent Particles of many Bodies, by the Action of other Bodies upon them : all *acid* Liquors will lose that Texture and Configuration of Parts upon the mixture of an *Alkali*, that shall destroy their Acidity ; an Addition of running *Mercury* to corrosive *Sublimate*, and raising them together, destroys that Figure and Disposition of Parts, which made the latter a Poison : And many Alterations analogous to these may by Medicine be brought about in a human Body. Are not then the Instruments by which this is done, very justly call'd *Alterants* ? And where the Change is from bad to good, are they not to be esteemed and valued ? Yet without going so far as the Change of Figure in the *original* constituent Particles, which is an Inquiry both useless and uncertain ; there are many Changes made in the animal Fluids, by Medicine, of which we have great certainty : and in the proper Acceptation of the Term, all that do this come under the

Class

Class of *Alterants*. The Consistence of the Blood is changeable by these Instruments, from thinner to thicker, from sharp to smooth and soft, from a greater to a lesser degree of Warmth, and *vice versa*, in all these Instances, by Medicines whose Tendency to those Ends we can be near certain of. A thin, sharp, hot, swift Blood, as in a *Hætick*, may be made thicker, smoother, cooler, and more slow in its Motion; and a fizy, thick, slow Blood, as in a *Chlorosis*, may be made more thin, more fluid, and more quick in Motion; and by Medicines, which certainly for these very Reasons are to be deem'd *Alterants*, and very powerful and useful ones too, when in such hands as understand their Application.

IF there be any thing of Truth in this, which every one is capable of judging of, what must then be thought of the Doctor's Assertion, † *Of any really good and lasting Effects of those passing under the pompous Title of ALTERANT MEDICINES, all Nature is silent?* And even in that sense of changing only the sensible Properties of the animal Fluids, does Dr. Woodward include *Alterants*, because he instances particularly in *Steel*: But here is

a great End to be obtained by arguing from original unalterable Particles, that the Bile is therefore unalterable by Medicines in the Body ; and consequently against the Use of *Alterants*, because the Doctor's Practice is for the Good of his Country reduced only to Vomits, and Oils, or Lenitives. The whole Tenour therefore of what he further says under this Head of *Remedies*, amounts to no more than fetching up these Salts, and guarding against their Depredations.

LET us now examine a little whether the Doctor's Practice is any more agreeable to the real Constitution of a human Body, and more consonant to the common Notions and Reasons of things, than his Hypothesis of Health and Diseases.

TO this purpose it may be proper in the first place to observe, that Vomiting is an unnatural Action of the Stomach, and happens not but from a strong Convulsion of its Fibres and Coats. Which Consideration alone would weigh with a great many against putting it into those Motions, except on very extraordinary Occasions. It is in the Nature and Make of the Animal Fibres, the more they

are strain'd, the more they are weaken'd ; and that as their natural Tensions and Vibrations preserve their Vigour and Strength, so every Motion that is beyond those must weaken and destroy them.

PROVOKING therefore the Stomach by Vomiting, is indeed to be regarded in a Case where a lesser Evil is eligible, only to avoid a greater. And the common Experience of Mankind will evidence against this Practice, because it is so manifestly dangerous to use the Stomach to those unnatural Inversions, that hardly any who have brought it upon themselves by repeated Debauches, ever meet with a Cure, without great Care and Judgment.

BUT the immediate End herein proposed by *Dr. Woodward*, cannot be answer'd. He supposes a Redundance of a vitiated Bile in the Stomach, and that fetching it up, must be the shortest and safest Cure : but from what has been already observed hereupon, it will appear, that the more a Person vomits, the more Bile he will have in his Stomach : nay, it is demonstrable, that no Bile at all ever is in the Stomach, but when brought thither by this unnatural means. It is obvious to every one who goes through this Operation, that the
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first Reachings bring up no Bile, and that which does come up, is only when the Convulsion is very strong, and the Stomach grievously sick. But the Doctor accounts for it thus, that the Bile lies at the bottom of the Stomach, and requires brisk Agitation and Rouzing, before it can be fetch'd away : tho this has been prov'd absolutely inconsistent with the natural Make of the Stomach, and is owing to the Doctor's intire Unacquaintance therewith. He therefore lies under no less an Absurdity in this Case, than pumping up into the Stomach what would otherwise never come there, by means contriv'd on purpose to clear the Stomach of it : The Doctor vomits to fetch Bile out of the Stomach, whereas without his Vomit there would be no Bile there ; so that he directly causes what he pretends to cure. This is within the compass of every Capacity to be a Judge of.

THERE are indeed many Instances wherein Bile comes up, without the Administration of a Medicine to provoke Vomiting ; but this is always in great Disorders from Intemperance, or some other Causes, which occasion frequent Reachings, strong enough to fetch up the Bile from its natural Drain. And this very Case makes greatly against the Doc-

tor's Practice, because the frequent Repetitions of Vomiting render it almost impossible but that Bile enough should be thereby pump'd up into the Stomach, as to be the occasion of almost continual Disorders there. The Notion therefore of coaxing up a bilious Juice from the Stomach with Vomits, Posset-Drinks, and Feathers, must either be from an uncommon Ignorance, or from a worse Cause. For from the obvious Nature of things it is demonstrable, that whosoever takes this way of being well, will be continually sick; because it makes the Stomach to receive a great deal of Nastiness, that otherwise would never come there. The Operation of one Vomit lays a sure Foundation for the want of another; unless the Strength of a Constitution can digest off the Bile so unnaturally brought into the Stomach with the common Aliments, which indeed often happens.

IT cannot be deny'd but that there are many Cases wherein Vomits are given with good reason; but to fetch out of the Stomach what naturally never comes there, is at no time a reason for this Practice, except with *Dr. Woodward*. And were it not for being carried into too great a length, it might be here shew'd that Vomits are rarely given only
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with respect to what they are to fetch out of the Stomach, by those who reason rightly about them. Where the Juices are viscid, and the Glands all over the Body too much loaded, a Vomit does great Service, as a powerful Exercise, that shakes and squeezes forcibly all the Parts, so as to dislodge their Contents, which otherwise could not be come at. And very good Judges in these matters have been of the opinion, that an Emetick Medicine seldom excites above the first Reaching; the foul Juices which are thereby brought up into the Stomach, occasioning the future Irritations. But by *Dr. Woodward* all the important Ends of this Operation are quite overlook'd, and only a trifling Figment assigned for it, that is both impracticable and unnatural.

THE other Branches of this new Practice are Oils and Lenitives, under a notion of guarding the Parts from the Depredations of these Salts, and gently solliciting their Discharge.

IT will be allow'd the Doctor, that there are many Cases, wherein the Cause is a sharp Acrimony of the Humours, and that such a Method of Softeners is then convenient and useful: but this is very different from its being

always so, and that therefore the same Means are always necessary. This System is too narrow and contracted by a great deal, to take in all that concerns the Causes and the Cures of Distempers. And this Practice in particular cannot reach with any efficacy beyond the first Passages ; but there was a necessity for it, according to the Doctor's Hypothesis : and because he knows of but one Cause, and one original Seat of Distempers, there must be also but one Intention of Cure.

BUT Narrowness and Insufficiency is not all that lies against this Practice. For in abundance of Instances it must prove injurious and destructive. But this Error again the Doctor has fallen into, through a want of true Knowledge in the human Mechanism. Oily and unctuous Medicines do certainly take place to advantage, where the Humours are thin and sharp, and the Fibres tense and rigid, that is, whenever sweetning and relaxing are necessary : but where the Humours are heavy and sluggish, and the Fibres overloaded and inactive, these Means will be mischievous and fatal, because Oils and Lenitives will add to the Heaviness of the Humours, and increase a Relaxation in the Fibres : so that instead of coaxing away in a *placid* manner the morbid
Matter,

Matter, it will become more stagnant and obstructed, insomuch as sometimes to bring on Putrefaction and Mortification.

THIS is evidenced by the common Experience in Surgery, and has been a great Reason of altering their Practice in many Cases from unctuous and cooling, to warm and spirituous Dressings. The former are found to make a Stagnation of Humours upon a Part, both by thickening the Matter, and deadning the Spring and Tone of the Fibres; whereas the other discomb the obstructed Matter, and keep on that natural Tonick Motion, which facilitates and promotes its intire Dislodgement.

THIS Practice therefore cannot but in most Cases clog the Wheels and Springs of the Machine, slacken their Motion, and injure the Constitution, instead of helping them: for the Animal OEconomy is to be kept up by much finer Helps than gross Oils; and the due Tone and Vibration of the Solids, wherein consists the main Agency in the whole Frame, requires the most exalted and subtile Instruments to preserve them. But all that is truly mechanical and rational in these matters, lies intirely out of the Doctor's reach, because he has not dropt one Hint, nor even one con-

sistent Sentence, comporting with the *Rules* and *Laws* of Nature, either in his *Idea of Man*, his Account of *Diseases*, or his Discourse of Remedies. What Methods therefore the Doctor may think fit, upon such a defective and unjust Foundation, to pursue in Cure, they can never answer, and consequently cannot be worth any one's pains to examine. But because Dr. *Woodward* has been at uncommon pains to spread about his late Book, I thought thus much might be convenient, to apprise the Unwary of the principal Mistakes therein.

BEFORE I take leave of this extraordinary Performance, it may be necessary to say somewhat of the long Discourse Dr. *Woodward* has founded upon this Hypothesis, about the Small-Pox.

IT is known to the Learned, that Dr. *Freind* published some time since certain Commentaries upon *Hippocrates, de Morbis Popularibus*. In one of those Commentaries that Gentleman mentions particular Cases in the Small-Pox, wherein Evacuation is indicated, by Phlebotomy or Stool. But his Caution and Tenderness in so nice a Point induced him to confirm this Practice by the Authority of the most
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Eminent now in the Profession, who have given their Judgment in Letters which are published in this Commentary.

HEREUPON Dr. *Woodward* draws up a Charge against those Gentlemen collectively, for introducing a new Practice, which he disguises under the name of *Purging in the Small-Pox*.

THE Physicians here aimed at, have advised this Evacuation only in some particular Circumstances of this Distemper; that is, chiefly in such Cases of the confluent kind, where the whole Load of Humours cannot be thrown off by the Surface and Glands about the Mouth, but stopping when the Pustules grow hard, returns back into the Blood, and raises a secondary Fever, which proves often fatal: and their Reasons for thus doing they have communicated to one another in the *Latin* Language, as a Point in Practice of great importance. But Dr. *Woodward* in *English* has harangued the Populace, and endeavoured to frighten People with a Belief that their general Practice in this Distemper is by Purging: And from Instances of its Impropriety in some Cases, takes occasion to be very compassionate for his Country, to weep over the weekly Bills, and inveigh as bitterly against

gainst Purges, as a crazy Enthusiast would against the *Scarlet Whore*; by this means prostituting the Honour of the Profession, and marking out those of greatest Eminence therein to publick Resentment.

HE traduces these Gentlemen also by a delusory Name; for Purging in the common Acceptation in *English* has a very different Idea from those Terms of the Learned whence it is translated. Solliciting the Discharge of an Overload of bad Humours by Stool, which the Constitution is not of itself able to struggle with, is amongst them express'd in Terms which may bear the *English* word *Purging* in a restrain'd Sense; but in the most enlarged Acceptation of it, and as Dr. *Woodward* uses it, it is not true of their Writing or Practice. I know not what Hopes of Success the Doctor has from such Arts as these, only to recommend himself: but in order thereunto to falsify and traduce the Opinions and Practices of others, will never do him much Service with the more intelligent and equitable Part of the World.

BUT the Doctor here stands chargeable not only with a Misrepresentation of others, but is himself guilty of a great Error in Judgment:

ment: For after he has liberally inveighed against Purging at all, he finds fault with the most gentle Catharticks; because, he says, they only *stir up* and *rouze* the *bilious Principle*, and *wake a sleeping Lion*; whereas if any at all be given, they ought to be strong enough to carry all before them, and drive the Humours quite out of the Body. But it is very strange, that of a Method which is altogether wrong, the most severe should be most safe; and one would think that the same Reasons that hold good against Purging at all, must certainly conclude most against those which are strongest: and yet the Support of a favourite Hypothesis, and the Pleasure of finding fault with others, are Motives that often lead us into such Difficulties and Reasonings as these.

YET after all, so far as these Physicians advise Purging in the Small-pox, it is also practised by common Consent in many other Cases of Fevers: that is, wherever Nature makes an imperfect Crisis, and the Efforts of the Constitution are not able to bring the peccant Matter to a head, or throw it off the principal Parts; and wherever such Matter threatens mischief to some noble Part. These happen frequently in inflammatory Fevers; and Evacuation, often by Stool, is promoted, both

to ease the Constitution of the Overload, and draw off the Humours, that would be otherwise troublesome. And this Assistance in some particular Cases of the Small-Pox, seems so consonant to Nature and Reason, that an Omission of it can arise only from an Unacquaintance with the true Procedure of the Distemper. Dr. *Woodward's* confounding, therefore, Cases where it is not called for, but forbid, with those wherein it is plainly indicated, is the Fault of His Understanding, and not of This Practice ; and it is great pity the *Doctor* should not know, that strong Purging will raise a Fever, and a gentle Evacuation this way abate it. The many Instances in this Distemper, which he likewise runs over in a superficial manner, only to throw out Invectives on every occasion, may be passed by as not worth notice.

BUT it is difficult to overlook some other Instances of Dr. *Woodward's* Disingenuity upon a more particular Nature. He takes notice of an Author's talking of *the Fluid of the Nerves being immediately altered by the nervous Juice* * ; of a *Hurry and Confusion of the Spirits* ; of a *Secretion of Spirits*, &c. for the sake only of Misrepresentation, and the Opportunity of a tri-

* Page 166.

King Jett; saying, That Author had advanced nothing *mechanical*, tho he was pleased to stile his Writings so, and that he might as properly have called them *Musical* †. Now it is well known to all, that the Author thus piqued at uses the Terms *nervous Fluid*, and *animal Spirits*, in the same Sense; and that their *Motion, Hurry, Confusion*, &c. in his Sense, is nothing but an Irregularity of Action in the Fibres, that every one of Understanding can reconcile with *Mechanism*, in the strictest Sense of the word: And that Author, in every Expression, keeps the Attention close to some mechanical Property of the Agent he is speaking of, and to which every Effect is assigned. The Motions of the Nerves, and the Fluid they contain, are talked of consistently with those *Laws*, by which such minute Agents are capable of being determined; and yet Dr. Woodward will put upon him the way of speaking common to *Willis*, saying, * *he marshals, commands, and detaches them* (the Spirits) *forth upon every Alarm*, and talks afterwards of *Troops* and *military Discipline*, and this too to make it borrowed from *Willis*: whereas it is manifest to a Demonstration, this Author had as different a Notion of what he sometimes calls *animal Spirits*, from

† Page 167.

* Ibid.

Willis, as it is possible for any two things to differ. He understands by them a Fluid, whose Motions are under the common Laws of Mechanism, and *Willis* discovers no certain Notion of them at all, but as a *Gas*, or *Explosion*, or *Halitus*, of which he speaks in no mechanical way, but just in the same precarious delusory manner as *Dr. Woodward* does of his Bile. When the Doctor also, upon this Occasion, charges this Author with *not having given one Argument, that there are really animal Spirits, or a nervous Fluid* †, he proves that he does not, or cannot, or will not understand him; for that Author means nothing by *animal Spirits*, and a *nervous Fluid*, but what is as manifestly in them as the Blood is in the Arteries and Veins. But for further Arguments for their Existence and Secretion, *Dr. Woodward* may turn to *Bellini*; where he will be taught to talk about these Matters in a much more distinct and intelligible way, than what he has hitherto accustom'd himself to.

ANOTHER remarkable Disingenuity of *Dr. Woodward's*, is towards the same Author; who, in his *Essay on Poisons*, places that of the *Vipers* in certain Salts, that shoot out into chry-

† Page 167.

Stalline *Spicula*, or Darts, which wound the Membranes, and destroy the Blood's natural Texture; and yet says the *Axungia* is a Cure, by sheathing those *Spicula*; and that the Flesh is so, by supplying the Blood with such volatile Parts, as assist its Circulation and Fluidity: For the Doctor greatly flourishes upon this as a Contradiction, saying, *A Physician in a DISCOURSE ON POISONS*, contends that the *Flesh and Fat of a Viper is rendered salutiferous, and an Antidote, by the VERY SAME MEANS* that he also there contends the *Sanies of that Creature is rendered noxious and venomous**. Now Dr. Woodward is here grievously out in what it highly concerns him to understand, or he wilfully puts a Deception upon his Reader by a Misrepresentation; and this Deception lies in the Expression, the *very same Means*, because thereby is hinted to be, both in the Poison, and the Cure, a Likeness of Figure in the Agent. But if the Doctor had but a slight Notion of Mechanism, he would have known that the Diversity of Bulk, and of the Quantity of Motion and *Impetus*, thence arising, would make a prodigious Alteration in both these Cases. Even common Experience informs us, how the same Diversity,

* Page 174.

in many acid Liquors, whose constituent Parts are of like Figures, makes as great an Alteration in their Effects upon the Body. A strong Acid will do many things ascribed to the viperine Poison, or *Spicula*, in wounding the Membranes, and destroying the natural Cohesions of the Juices; and yet it is well known the same Acid may be so far weakened, as to give but agreeable Irritations, and to prove a good Medicine. And thus may all Substances, of the same Figure and Arrangement of Parts, by their different Bulks and Quantities of Motion, be brought down from the most mischievous to the most innocent. And this Diversity is plainly supposed in the foregoing Doctrine, between the venomous *Spicula* in the *Sanies* of the Viper, and the volatile Salts in the Flesh.

THERE is this further Difference likewise in these two Circumstances, that are pretended to contradict one another; that the *Sanies* is supposed to be immediately transmitted into the Blood, thro a Wound, with these Salts in their full Force; but the Flesh is taken in by the common way of the Food, and must thereby have its Salts more broke by the Actions of the Parts upon them, and entangled with more viscid Parts; both which render them much less active and efficacious when in
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the Blood : so that the Powers, in both these Cases, are as considerably different, as between the most sharpened Acid, and the weakest one. There are also many other Substances, well known to be very mischievous, if immediately transfused into the Blood, that do no manner of mischief, but are of service, when taken in as Food ; because the Actions of Mastication and Digestion destroy or weaken those Powers, in Parts where their Exertions are imperceptible, so that they become only capable, in a much weaker degree, to exert themselves, by that time they arrive where they would be otherwise hurtful. In short, a very bad and a very good Effect may be brought about by Agents of the same mechanical Properties, only by a Diversification of their *Momenta*, or Powers of Action, from their different Bulks and Quantities of Motion ; and the learned Gentleman here so remarkably piqued at, has, in another place of the same Essay, shewn us how, by the same Agency, a dangerous Poison is brought to a safe and a useful Medicine, in the Preparation of *Mercurius Dulcis*, from *corrosive Sublimate*. So that notwithstanding Dr. Woodward's frequent mention of *Laws*, and *Rules*, and *Mechanism*, this is a Matter that he seems altogether to have been lost in, because it is not capable to be understood, or talked of intelligibly, without those *Præcognita* from the

Laws of Nature; and there is no Contradiction in this Doctrine, but so far as Dr. Woodward misunderstands it.

THE Fat of the *Viper* is not suggested to be a Cure, by the same Properties, as any Part is said to be a Poison, because by very contrary Properties it is supposed to have its good Effects; that is, in sheathing the Points of those subtile Instruments, which grosser Oils, or unctuous Substances, could perhaps not reach: so that this is palpably a Falsification.

IMMEDIATELY again Dr. Woodward makes the same Author assert * *the eating Flesh to be a Security and a Preservative against the Plague, which just before he had intimated to be a Cause of the same Distemper*; whereas in that whole Essay there is not one word concerning *eating Flesh* in either of those Views; and all mention possible to bring any thing about *Flesh* to mind, is where infected Persons and dead Carcasses are hinted at as means of Contagion; and where those are said to *fare best* in such Calamities, who *feed well*.

MENTION not these things, in vindication of the true Sense of the aforementioned

Essays, because it is not wanted with any Persons of tolerable Knowledge in such Matters ; but as a useful Hint to those whose Curiosity only may incite them to overlook this Controversy, and may be influenced more by the Honour and Justice of it, than the Argument : But whether such Persons will make the Compliment of this Treatment to the Understanding or Probity of *Dr. Woodward*, I will not undertake to determine.

A N O T H E R Physician, that stands also in his way, he falls very severely upon ; and takes advantage from that Gentleman's Concession, that none recovered under a particular Symptom, *viz.* bloody Urine, to insinuate, their Loss to his Treatment. Now this is a Symptom, that in the Experience of all is very fatal in the Small-Pox, insomuch that hardly an Instance in an Age is to be met with, of a Recovery where it appears ; must therefore this Gentleman's Practice be thus barbarously traduced, because he frankly owns he could never recover any one under that Circumstance ?

I T will to any other Person appear to the Credit of his Practice very much, that he could save them so long in this Condition as the fifteenth or sixteenth Day, because there seems

the greatest Encouragement from thence to preserve them thro the whole, where it is possible. But as *Dr. Woodward* takes all Advantages of Detraction, and to bring every one's Practice into Disrepute but his own; so he charges the supposed Errors of this Gentleman chiefly upon Camphore: but the good Effects of this Medicine, in all malignant Fevers, are too well known and attested, to be hurt by what he says on this account. *Riverius*, whose Practice yet remains with us for the best of his time, gave it very liberally, and justly laid great stress upon it; and were it not for employing more Time than I think this Occasion can justify me in, I could produce abundance of Instances, wherein it has given surprizing Turns for the better in very desperate Cases. But I am confident, the Practice of all, who run not out into such Singularities as *Dr. Woodward*, will witness hereunto.

OF the same malicious Turn, is his insinuating, that all those bad Cases, that have been recovered where Purging was used, were made bad by the Purges*. 'The Doctor, I am certain, would not take it very well to be told, that all his Patients, that did not die under his hands, may thank their Constitutions, and

* Page 188.

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that those Cases, which were very bad, were rendered so by his Method; and yet this is the Liberty he takes with all others.

THE last thing remarkable that I shall take notice of in this Performance, is the Doctor's Treatment of other People in general, especially those who have most deserved his Envy, by a Superiority of Reputation and Practice. He speaks of a Patient under their joint Care, *'Tis not a little to the Praise of his Constitution that he recovered* *. In another place, he says, *I am persuaded it will one day but too plainly appear, these Gentlemen have not dealt with the Candour and Frankness that was requisite* †. And he goes on to charge them with Concealment of Part of their Success, which may lead other Practitioners into a wrong and unfortunate Method; and insinuates something even abhorrent to think of. They are also accused by him with a *Narrowness, Partiality, and want of due Concern for the Honour, Esteem, and Happiness of the Community; instead of that, setting up Clubs, Cabals, and Combinations, with design to supplant all who come not into their Measures*. I know no other Foundation for all this, than that some Physicians, who are not altogether so all-sufficient and full of themselves as Dr. Woodward, have Places

* Page 175.

† Page 189.
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of common Resort, where for the *Honour, Esteem, and Happiness of the Community*, they are frank and open in giving and receiving all such Informations as concern the general Practice, and may be of use to be acquainted with,

M A N Y Pages further are taken up with an Account of the weekly Bills, the Increase of which is laid to this new Practice, as he calls it; and in the Year 1710. above triple the Number died of the Small-Pox, than in any preceding Year: and *this*, he says, *was the chief Time of their Practice*. Now setting aside the Reflection pointed at here, it is to be observed, that the Small-Pox is an Epidemical Disease, governed by the Constitution of Air, and Alterations of Seasons; so that it is the most absurd, as well as the most ill-natured Suggestion imaginable, that at any particular time its Fatality is owing to any Methods of treating it; especially to a Practice which extends not to a Number, bearing any Proportion to the Increase of what die. The Causes of these are almost infinite in their Course and Efficacy, and under the same Practice and Management sometimes sweep away great Numbers, and sometimes hardly any; as in the short Fever, which some time ago, about the Month of *August*, went thro the whole Kingdom, and hardly missed one Person in *London*, yet
took

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took off none, the Patient recovering about the third Day. Besides, an Increase of triple the Number in the Year 1710. by an ordinary Gueſſer, would be laid to more probable Causes than this civil good-natured Gentleman has done ; for ſuch a Number hardly comes under the Care of all the Phyſicians in *London* : The Increase of the City and of Inhabitants likewise might with ſome have a ſhare herein ; and even according to the Doctor's own *bilious System*, others might remark that Year was particularly very cholerick ; and that Luxury, by encreasing this Principle at that time, made ſtrange havock in the State, as well as in Diſtempers : ſo that this Practice being *in the height* in that Year, might not perhaps be ſo much to blame. But this Inſinuation, in a ſerious way, has ſomething in it ſo ſhocking and inhumane, that there is no thinking of it with Temper.

BUT this Liberty which Dr. Woodward thus ſtrangely indulges himſelf in, to inveigh againſt, and reflect upon, others, at all Adventures, and on all Occaſions, very often leaves himſelf open to Reprifals, and without one's being at any pains to diſtort and pervert his meaning. Wherever a Patient is mentioned, who has been purged and grows worſe, he lays it immediately upon the Purge ; whereas were it in like manner returned upon every

Instance of his own Practice, it would be equally just, but certainly thought very unfair. However, when the Doctor speaks of Vomits making a bad Case a favourable one, by taking away the Matter of the Disease, without Uncharitableness it may be presumed he compliments his Practice without any Grounds, and that those Cases would always have proved favourable without his help. Besides, where there is a foul Habit, and Indications of Relief by a Vomit, nothing is more common than for all other Physicians, if they are called in time, to advise it: yet not upon a Presumption of lessening the Matter of the Pock, in such manner as Dr. *Woodward* pretends; but to remove a Load, which would be troublesome during the Conflict with that Distemper, and to give such Concussions and Shakes to the whole Habit, as may dispose better the morbid Matter to Separation and Discharge at its proper Outlets.

FURTHERMORE, when the Doctor is not only content to cut off the Supply of the pocky Matter into the Habit, so as to lessen greatly the Eruption and worser Symptoms, but also to take it all away in some Instances; so that, as he words it *, *The Fever ceases imme-*

* Page 86.

diately ; the Pustules, that perhaps begin to appear, come to a stand and vanish, their Supply being cut off by a Vomit : There is a great deal of reason to think that in all such Instances he has altogether mistaken the Distemper, and pronounced it would be the Small-Pox, when it would have been no such thing. And his Case of the Lady Anne Grey plainly justifies such a Construction.

OF this Case, he says †, *After the ordinary Symptoms——on the Morning of the fourth Day from the Invasion, several Pimples were observed upon her Face, Breast, and Arms——in the Evening they were further advanced, and pretty thick ; several present, who were really Judges, and very conversant with that Disease——agreed they were the Small-Pox* *. Yet what does all this amount to ? They who are conversant with Diseases, and are really Judges, see all these Symptoms frequently, when it does not prove the Small-Pox ; but a Vomit given that Evening, worked very plentifully, and the next Morning there was not one Pimple to be seen ||. And a great deal more does the Doctor go on to say to this purpose, which seems altogether owing to a false Judgment of Cases, and out of an Over-fondness for his singular Method. For altho a Vo-

† Ibid.

* Page 87.

|| Ibid.

mit will fetch up a great deal from the Stomach and neighbouring Parts, which by their Concussions shake and drain their Contents into it ; yet no one can imagine that when a Humour is got to the Surface, and lodged in the Capillaries, a Vomit can bring it back again into the Stomach, to be thrown out by it. No one, I say, can imagine such a thing as this, especially if they have any Notion of the natural Obstacles to such a Procedure. Without taking a liberty therefore of any Misrepresentation, it appears from the Facts, as by himself related, that neither the Lady *Anne Grey*, or any other Patient of this Class, would have had the Small-Pox, but had their Cases really mistaken by the Doctor.

REFLECTIONS of this kind are obvious in many other Parts of the Doctor's Practice ; but such an Office is ungrateful, and, I think, not fair or handsome in any respect, but where there is such Provocation given, as has been throughout this whole Book of *Dr. Woodward's*. Besides, I think, there is a great deal of Difference between such Reflections, naturally arising out of a Relation, and perverting a Relation or an Opinion, only for an Opportunity to make them.

ONE Instance of this Perverſion in Dr. Woodward was juſt before touched upon, concerning Camphore and Acids given, where there is the Symptom of bloody Urine; but becauſe ſome may lay great ſtreſs upon a Man's Reaſoning, from the Opinion only they conceive of his Probity, the Reader is to be reminded, that in this Caſe Dr. Woodward ſays *, that *'twould doubtleſs have been of uſe — ſince there is no Precedent, nor the Authority of any one ſingle, learned, judicious Phyſician, that I know of, for this Praẽtice, to have ſet forth the Reaſons in Nature that induced him to it. They muſt ſurely be very cogent, ſince he himſelf confeſſes that as certainly as uſed, it ended in the Death of the Patient.* As to the former Part of this, it has been already ſhewn, how Riverius, and all Phyſicians of Note ſince, have made uſe of the ſame Method, as it appeared to them upon good Reaſon; but the Doctor's concluding with, *It ended in the Death of the Patient,* is as flatly as falſly charging upon the Medicine, what the Phyſician here reflected upon, and all other Phyſicians too, in like Caſes, charge upon a fatal Symptom. Becauſe Dr. Cade owns, that he never knew a Patient, with that Symptom of bloody Water, recover, and tells us for

what Reasons he gave Camphore in such Cases ; Dr. *Woodward* insinuates, that the giving Camphire ended in Death, and that Dr. *Cade* had no other Reason in giving it. And yet just after Dr. *Woodward* says *, that *what seems mightily to amuse him, was, that by it the Symptom was taken off.* And was not this then a good Reason for the Practice? No, says Dr. *Woodward*, *one would be apt to think that could not well be judged much to the Patient's advantage, since Death always certainly followed.* Did ever any one before, for the sake of throwing Scandal only, deny that the Removal of a bad Symptom was an Advantage to a Patient? Here was a Symptom, always found a fatal Sign ; Dr. *Cade* finds a Method that will remove this Symptom, and continue the Patient to a longer Period than usual in the like Case : but because the Patient could not quite be recovered, and at last sinks under the Distemper, Dr. *Woodward* will conclude to the Prejudice of this Practice, whereas every one else would think themselves obliged to him ; and all candid Judges will think so, notwithstanding the Envy Dr. *Woodward* here bears against him, and the Discredit he endeavours to bring upon the Practice.

ANOTHER Artifice of the like nature Dr. Woodward uses, when he takes notice of a Case wherein there were fresh Pustules came out even to the 28th Day, and the Patient had gentle Catharticks given several times during that Space: Hereupon, he says *, *The Things I would know, is, whether this Physician, who allows this REPULLULATING of the Pustles to be very rare, can give one single Instance of its ever happening where there were no Medicines given?* thereby insinuating, that the Purges were the Cause of this Repullulation. But for fear this should not be sufficient to fix such an Imputation, he asks further †, *Whether the successive stirring of the SEMINIUM of the Pustules in its Source, and FLUSHING it into the Blood, and upon the Habit, by such gentle Purging, did not really produce those successive Crops of Pustules, &c.* Now this Repullulation is known in many Instances of this Distemper, by those who have been conversant therewith, tho rarely; why then should it be charged upon these Gentlemen's Practices, only because Dr. Woodward has found a way to flush the morbid Matter into the Blood by gentle Purges? And thus, after the same rate, every thing that comports not with his Hypothesis, must be charged to a

* Pag. 159.

† Page 160.

bad Practice. But his Hypothesis, in this very respect, has been already proved fallacious, and that Purges are no ways an adequate Cause to such an Effect ; it lies upon him therefore to retract this Accusation, or shew better Reasons, than from his own Hypothesis, that Purges are herein to blame.

BESIDES, if the Doctor's Hypothesis would hold, to conclude any thing consistently, his own Arguments for cutting off the Supply of morbid Matter by Vomits, would favour doing so likewise by Purges ; but only he maintains a Notion that Purges *flush* and *flush* it into the Blood, contrary both to Experience and Reason. This Practice however of Purging, in the particular Case above-mentioned, will no doubt stand justified, notwithstanding all that Dr. *Woodward* has produced against it, more out of particular Prejudices, it is to be feared, than good Reason. And to all equitable and disinterested Observers, it already bids as fair for as great a Reformation in the Management of this Distemper, as what was made before by *Sydenham*, with respect to the common Regimen therein : That was a long time clamoured against by those who understood it not, and this may do Mischief, and be disgraced by the Unskilful, as may many other Branches of Practice by the

the same means ; without being an Argument to the disadvantage of those who understand it, and who have taught the way thereunto.

WHEN *Dr. Woodward* also urges (which he does with great Airs of Insult and Triumph) that none of these Gentlemen have given any Histories of Cases, wherein Purging was used, and the Patient died, he is guilty of a very false Accusation, because the very first in this Commentary * is of one that died the 24th Day after the Seizure. This I mention, not with regard to the Justification of this Practice, but as a further Confirmation how little Value *Dr. Woodward* has for Truth, when Falsification is more for his Purpose : Altho in this Case there appears abundant Reason to think Purging, in the manner there managed, was of great Service, and bid fairest of all the means used to save the Patient.

BUT let one further Instance of the Doctor's Civility be taken notice of, because it is not only in it self extraordinary, but a Proof that the greatest Merit has the largest share of his Talent at Detraction. The mention of a Physician, that it seems stands grievously in his way, he says brought to his Remembrance

* Commentary 7.

one *Thessalus*, a Practitioner of old, famous
 ‘ for running down all the Doctrines that had
 ‘ obtained before ; and, with a sort of Rage,
 ‘ declaiming against the Physicians of all Ages.’
 And then he goes on to say †, *Well were it for*
the Memory of this Gentleman, were it on Record
some good thing he had done ; had all Antiquity
transmitted to us the Memory of so much as one
Medicine he had found out, one useful Truth he
had advanced, on any single Proposition of Service
in human Life. Now here is insinuated of this
 Person, what the whole World are Witnesses to
 the Falseness of, because in his Writings he
 mentions abundance of Physicians with all
 possible Honour and Respect, and no where
 finds fault but with Dreamers and Hypothesis-
 Makers. The other Part likewise of this Sug-
 gestion is so gross at first sight, that it deserves
 no other regard but Scorn and Neglect. Such
 Outrages will however stand upon Record a-
 gainst *Dr. Woodward*, as long as any Impres-
 sions of Honour and good Sense are left in the
 World.

† Page 270, 271.



